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Editorial

When we set the deadline for the contributions collected in this issue for April 2020, we could not have imagined that we would find ourselves amidst a global pandemic that had country after country go into lockdown and enforce quarantine measures. Yet, in spite of being locked down – and in some cases not even in their own homes – all authors were able to participate in the production of this issue. Thanks in large part to the *personalisation of equipment* and the extensive *connection through networking*, people were not only able to obtain *access to countless databases* from anywhere, but the *interactive use of machines of information and communication* enabled *innovative forms of dialogue and collective interactivity* in the absence of physical proximity. While these descriptions might sound like the breathless exultations of a contemporary tech-journal, they are taken from Félix Guattari's descriptions of an emergent technological era that he would call *post-media* (see Guattari 2009a; 2009c; 2013). That all contributors to this issue were able to continue their work amidst a global pandemic was made possible by the widespread adoption of those technologies most commonly (and superficially) associated with the post-media era: the personal computer and the world wide web. What these technologies ultimately enabled the scholars to do, was to *take part* in academic work in spite of the global pandemic. This, of course, was never the horizon of the programmatic notion of post-media, which aimed at a "concerted reappropriation of communicational and information technology" because it would allow for "new practices of subjectivation" (Guattari 2009c, p. 299). Nothing seems further from Guattari's thought (and life) than to expand the modes of subjectivation characterised by work.

Although Guattari's discourse on post-media comprises just a "relatively small part of [his] broader, 'ecosophical' conception" (Broeckmann 2014, p. 1), the notion doubtlessly had a particular appeal to media-scholars and practitioners alike, as the shift away from centralised mass-media to new forms of decentralised post-mass-media became more pronounced throughout the 1990s and early 2000s. Focusing primarily on the detrimental effects of mass-media on both the individual psyche and the societal collective, Guattari was at the same time *describing* and *advocating* for a reappropriation of media-technologies from radio to Minitel. There already exists a wide-ranging collection of brilliant introductions to and examinations of Guattari's concept of post-media which provide a critical overview stressing both the diagnostic as well as the programmatic aspects of Guattari's proclamation of a post-media era (see especially

the texts collected in Apprich et al. 2013; Apprich et al. 2014; Brunner/Nigro/Raunig 2013). This special issue on *Post-Mass-Media and Participation* follows those more recent engagements by shifting the focus away from the technology itself, contextualising the notion of post-media within Guattari's thoughts on participation, and stresses the larger intellectual history that mourns a decline in participation since 1968 (see Coriat 1981; Lumley 1990; Ohno 1998; Revelli 1989, 1996). Instead of approaching Guattari's concept as a theory of media which facilitates and shapes forms of participation, we crucially approach post-media as first and foremost a question of participation, which is itself 'medial'.

While this larger framing is part of the *DFG*-research unit *Media and Participation*, this particular special issue emerged out of discussions around the 2019 *European Network for Cinema and Media Studies* conference in Gdánsk, Poland. Discussing the usefulness of the designation 'post-digital times' with young scholars from all over Europe,[1] we decided to survey how early career researchers adopt and adapt the concept of post-media for their work today, precisely to allow a reframing of the question of participation after the end of the 20th century. That a concept born of a reaction to political events and technological developments 30 years ago would still attract young scholars today is by no means a matter of course. The broadcast of the first Gulf War, which imbued Guattari's development of the term with a sense of urgency (see Genosko 2013, p. 17), is already beyond the lifetime of many young scholars. Their own experience is often limited to the broadcast of the Iraq War, which developed fundamentally different media-technological forms and strategies (see i. e. Crogan 2017; Gruisin 2010; Massumi 2015). In itself, the fact that we are not living in 1989 explains very little. Equally uninstructive, the reverse narrative paints Guattari as clairvoyantly predicting the development of the 1990s and early 2000s. This effectively implies that our contemporary condition began around 1989 and explains away the continued relevance of the term by arguing that 'not much has changed'. So how do we account for the simultaneous appeal of and difficulties in adopting the term that we will encounter throughout this issue? The context of the term is not to be found in the media-technological situation of 1989; instead, we must go back another 20 years to 1968 and the question of democratic participation.

Nostalgia for 1968

May 1968 in Paris proved to be the decisive event that would animate much of Guattari's work from this point on, especially his collaborations with Deleuze. In a way, their entire project can be seen as dealing with, as Guattari himself put it, "[their own]

1 For this reason, we have decided to for the first time publish an issue of *AugenBlick* in English. We would like to thank the *AugenBlick*-team and the Schueren Verlag for making this possible.

uncertainties; [they] were confused about the turn of events after May '68" (Guattari in Deleuze 2004, p. 216). Guattari was right in the thick of the events, riding his motorcycle between Paris and the clinic at *La Borde*, trying to convince "doctors, monitors, interns, and patients … to join the ranks of the revolution in Paris" (Dosse 2010, p. 172). "When '68 broke out", Guatarri recalls in an interview with Virginie Linhart, "I had the impression of walking on air" (Guattari, quoted in Dosse 2010, p. 171).

What the *molecular* events of May 1968 in France (see Deleuze/Guattari 1987, p. 216; see also Mengue, 1994) symbolised for Guattari was a new way to experiment with everyday life and desire. As the title of the second chapter of his collaboration with Antonio Negri fifteen years later proclaims: "The Revolution Began in 1968" (Guattari/Negri 2010, p. 33). From this point on, as Guattari explains, he "was concerned with the junction of the 'molecular revolutions' that the social struggles had revealed" (Guattari 2009b, p. 36). It was with the events of 1968 that Guattari understood political practice not as an enunciation of subjectivity, but as an emerging becoming-practice of intellectual thought. Theoretical expressions "should function as tools, as machines, with reference neither to an ideology nor to the communication of a particular form of subjectivity" (Guattari 2009e, p. 22). It is through 1968 that we most clearly find the political Guattari, as he "wanted to draw lessons from May '68 and re-energize the structures that had been shaken up by those events. Relaunching the revolutionary machine of May '68 was Guattari's properly political question." (Dosse 2010, p. 225) This would be the political promise of the post-media machine, which aimed primarily at the eventual "reinvention of democracy" (Guattari 2009c, p. 299).

Guattari's euphoria surrounding the events of May 1968 was followed by a period of contemplation where he strived "to better define how the metabolism of desire in the social field—the collective imaginary—is connected to the structures of power" (Guattari 2009b, p. 37). The aftermath of 1968 led him "to reexamine, in a critical fashion, [his] previous ideas about institutional analysis" (Guattari 2009b, p. 37). It was not until 1977 in Italy that such a relaunching of the revolutionary machine could be glimpsed in Europe. This time, however, Guattari was explicitly recognized as "one of the essential sources of inspiration for the Italian left" and became "a hero figure in Bologna" (Dosse 2010, p. 291). Guattari himself was not particularly "interested in terror or state repression but rather the molecular revolution that was taking place around Radio Alice" (Goddard 2013, p. 47). As Michael Goddard has shown, it was not the technological aspect of the popular free radio that peaked Guattari's interest, but the way it served to activate a revolutionary machine. As such, Guattari's remarks on Radio Alice "stand as an embryonic formula for the emergence of the post-media era as anticipated by Radio Alice and the Autonomia movement more generally" (Goddard 2013, p. 50).

This evolution of Guattari's thought leads from "people filled with nostalgia" (Guattari 2009d, p. 75) after 1968 and a rising interest in describing forms of suppression and subjectivation "taking place in a general atmosphere of gloom and disenchantment" (Guattari 1992, p. 16) to the eventual hope for the "reinvention of democracy" (Guattari 2009c, p. 299). It is a transformation leading from grievance for a lost democracy

post-1968 to a reinvention of democracy leading up to and following 1989. This marks Guattari as part of a broader sentiment in political thought to which he bore witness: Marco Revelli for example recounts how capital's reaction to the struggles of 1968 and 1977–79 took away the factory as "a place of belonging and aggregation, and sent individuals back to a state of atomisation and isolation" (Revelli 1996, p. 116–117, see also Revelli 1989). This pushed a singularised working class "irretrievably onto the defensive, and disaggregated it, with consequences that were not merely political but also existential and, in some respects, pathological" (Revelli 1996, p. 116–117). Thus ended the project that "perhaps was the last bastion of resistance to the structurally nihilistic realities of latter-day modernity." (Revelli 1996, p. 119–120)

The political and economic analyses of Benjamin Coriat and Taiichi Ohno come to similar conclusions in their respective works on Toyotism (Coriat 1991; Ohno 1988). Michael Hardt and Antonio Negri summarize this situation with their description of the fall of syndicalism and the decline in the power of unions, which – to them – signal the dialectic form of participation coming to its end (Hardt/Negri 1994, p. 240–241). The dialectic of workerism in institutionalised form and capitalist institutions mediated by the state has vanished, and "[t]he participatory models of both economic life and political representation have been totally destroyed" as a consequence (Hardt/Negri 1994, p. 268–269).

We want to stress the importance of this feeling of loss of political participation post-1968, which can be found in both the critiques of political economy of the time as well as the political theory of the Italian Autonomia in its connection with French poststructuralism. This feeling led to the formation of a new, different idea of participation towards and following the events of 1989. Those two dates, Hardt and Negri claim, are most relevant in understanding the change in social relations and political participation (see Hardt/Negri 1994, p. 284–5). It is no surprise then, that it is exactly this historical frame in which Guattari develops his concept of post-media as a form of reinventing the political through participation in the aesthetic paradigm.

Reinventing Democracy

Crucially, Guattari coined his concept of post-media *only after* a period of working with and theorizing the apparent loss of democratic practices and forms of revolutionary subjectivity that followed 1968 and the subsequent molecular revolutions from Italy to Brazil. In a book project Guattari was developing with Negri between 1983 and 1984, one can clearly trace this transformation of the concept of participation in their conception of a new democracy (Guattari/Negri 2010, p. 41). Here, they explicitly mark the historic caesura of 1968 in which democracy has supposedly shown itself as the one and only tool of *political* movement within the broader movement itself. Yet, its failure became apparent as the 1970s saw a decline in political action that failed to relaunch

the political machine. From then on, the task became to envision a new political project that entailed "the need to recharacterize the fundamental struggles in terms of a continuous conquest of (new) arenas of freedom, democracy, and of creativity" (Guattari/Negri 2010, p. 41). This need to *reinvent* democracy, rather than abandon the term, is based on the assumption that "that the proletariat, from this point on, [...] would not be able to comprehend a political movement except on the condition that it is founded on democratic arrangements" (Guattari/Negri 2010, p. 46). As the word democracy itself "has been trashed and mutilated" (Guattari/Negri 2010, p. 52) its redefinition and rearrangement became the political task. This could only be achieved through the destruction of the capitalist' "codes and norms of the production of subjectivity [...] It is only on this path that democracy can be reestablished." (Guattari/Negri 2010, p. 83)

Guattari underlined his view on the devastating state of French democracy in an article for *Le Monde* in 1990. "Democracy supposes a relative state of tension, where the collective intelligence arranges itself in multipolar formations that can apprehend economic and social realities from contrasting angles. French society today seems to be nearly depolarized. Values, those of Left and Right, have lost their traditional consistency." (Guattari as quoted in Genosko 2013, p. 22) The only two possible and identifiable political embodiments of the time according to Guattari were the racist, totalitarian *Front National* and the emerging ecological thematics in which he was taking part. This lack of possibilities to take part in preformed political formations can be understood as the postmodern condition of a democracy lost to the "fuzziness" of its time (Guattari as quoted in Genosko 2013, p. 22).

This description, even as late as 1990, is still nourished by the melancholia of the way May 1968 turned out and the devastation of the Italian state terror in the late 1970s. In Guattari's description we can clearly follow the notion of a lost democracy and its corresponding form of participation, that of *taking* part in a preformed ideological field of action. However, we are also able to track the undiminished hopefulness of Guattari's thought and his belief in a new mode of participation. We call this mode *having* part (*Teilhabe)*[2] as it is no longer the big molar gesture of taking part in the grand revolutionary call to action, but simply having part in the political aspects of the molecular revolutions of everyday life. Gary Genosko sums this up in his affirmation of hope in Guattari's political writings: "From 1970 to 1990, then, hope was found not in the revolutionary vanguard but in the intimate spheres of the everyday in civil society that can find political expression in new modes of valorization (of work and leisure) and the formation of solidarities with those both near and distant." (Genosko 2013, p. 22) This intimate sphere, however, was no transcendental intangible. Rather, as his writings on post-media make unmistakably clear, it had to be approached as a question of mediated relations and medial participation.

2 We are framing this difference as a historic transformation of the conception of democratic participation and do not join in the differentiation made elsewhere of an active form of taking part and a passive form of having part. See for example Fach, 2006.

The New Aesthetic Paradigm

The mode of having part in the everyday acts of civil society changed with increasing velocity during the final years of Guattari's writing. While, as we have seen, the need to re-conceptualise participation instead of simply mourning its decline became more and more pressing, the question of how exactly this form of taking part could be conceptualised remained enigmatic. We can most clearly see Guattari's strategy for reconceptualization in a "key text" (Hörl/Hansen 2013, p. 10; our translation) of his later work. In the chapter on *The New Aesthetic Paradigm*, Guattari tries to flesh out his observation that the "aesthetic power of feeling … seems on the verge of occupying a privileged position within the collective Assemblages of enunciation of our era" (Guattari 1995, p. 101). As Hörl and Hansen have pointed out, Guattari aims not at an expansion of the aesthetic, but "at nothing less than an insight into its fundamental historical transposition" (Hörl/Hansen 2013, p. 11; our translation). This historical dimension was, as they point out, closely tied to the concept of post-media, as it is the question of media-technology that becomes the central staging ground for the "fundamentally new position and a new sense of the aesthetic" (Hörl/Hansen 2013, p. 10; our translation).

Speaking of *the* new aesthetic paradigm does not signal a new paradigm within the aesthetic, but rather has to be understood as the aesthetic itself becoming the new paradigm. While it is therefore true that the new aesthetic paradigm cannot be reduced to questions of art, it is simultaneously impossible to understand without reference to it. This emphatic turn towards art, as Zepke argues, is a "relatively late development" (Zepke 2011, p. 207) in Guattari and closely tied to the experiences with the Italian autonomia sketched above. In spite of this influence, Zepke highlights how Guattari "models the method of autonomous aesthetic production on *traditional* artistic practices" (Zepke 2011, p. 212, our emphasis) by quoting Guattari's famous line early in the *Chaosmosis* that "[o]ne creates new modalities of subjectivity *in the same way* that an artist creates new forms from the palette" (Guattari 1995, p. 7, our emphasis). While it does "not have a monopoly on creation," art becomes the *model* through which to think the "decisive threshold constituting the new aesthetic paradigm" (Guattari 1995, p. 106).

As we have shown, after the loss of the old mode of participation – the mode of *taking part* in grand ideological gestures of revolution – a new form of *having part* seemed preferable. This new form of participation was modelled after art and is per se mediatic, just as its forms of expressions are necessarily "at once mediatic and singular" (Guattari as quoted in Genosko 2013, p. 23). As such, art had become the artistic machine of modernity, as Roberto Nigro has called it, a symptom of an ever-changing capitalism that coexists only with the ongoing reinvention of forms of subjectivity (Nigro 2016, p. 207).[3]

3 Elsewhere, the relation of aesthetics and politics is read as constitutional for both. Jaques Rancière (2000) imagines systems of *aisthesis* at the foundation of the political field, whilst each object of art has to be understood in its relation to the political.

Treating the question of post-media as one of mediatic participation signalling a historical transformation from *taking part* to *having part* (*Teilhabe*) means taking its political history of mourning into account, while enquiring into the hope placed in art as a model.

Post-Media and Participation

Throughout this issue, we will encounter the tension this historical legacy places on the hyphen of the ethico-political in Guattari's conception of the post-media era. This consequential falling apart of the ethical/political and the aesthetic in the current discourse is explicitly addressed in Bodini's contribution. His meditation on our current condition stresses that it is no longer enough to contrast a post-media era with either postmodernism or poststructuralism, its predecessor or its unrealised other, but rather that we have to distinguish various types of post-media to maintain its critical relevance. Offering a libidinal reading of post-media which sees desire as the absent center of a conceptual constellation comprising the terms singularity, ecology, technology, and temporality, further deepens the engagement with the programmatic aspect of Guattari's notion. While "[a]esthetics designates the conditions of possibilities of our libidinal experience; ethics designates its orientations" (Bodini, this issue), it is the coming undone of the hyphenated ethico-aesthetic employed by Guattari that Bodini laments. Writing from quarantine in Northern Italy he unfolds this problematic through a range of meditations on the conditions brought to consciousness by the global pandemic. Staging an encounter between Guattari's thought and contemporary writers engaging with the COVID-19 outbreak, he plays off Guattari's post-media against the post-media virality of the day. Distinguishing these forms of post-media while recognizing their shared elements is only possible by emphatically reconnecting the ethico-aesthetic. Ultimately, through his meditations he describes the COVID-19 situation as the becoming-conscious of the post-media situation, which is also always "a moment of self-consciousness of our 'medial participation', putting forward how, […] making available is always inseparable from making unavailable, including from excluding" (Bodini, this issue).

In her contribution, Anna Wiehl uses the documentary project *The Shore Line* as "a test-stone for the dictum of the participatory and transformative potential of post mass media" (Wiehl, this issue). To counter the resignation of a narrative of lost participation leading to 'clicktivism' and 'interpassivity', Wiehl similarly recognises the need to further qualify the concept of participation in a post-media era, instead of simply following the "posture of resignation" (Wiehl, this issue). Consequently, she elaborates the difference between participation *through* media and *creative* participation, which she terms *co-creation*. This co-creative form of participation is explicitly connected to Guattari's reframing of participation through post-media. Further advancing the case

for Guattari's relevance to contemporary documentary discourse, Wiehl focuses on two additional paradigms supplementing the question of participation. Engaging in the debates around the Bakthinian ideas of polyphony and plurivocality in relation to the well-established concept of documentary voice clearly marks the proximity to Guattari's late work, as he, on the very first page of *Chaosmosis* explicitly draws on these concepts to expand upon the notion of subjectivity. Finally, approaching the question of *The Shore Line* as an 'open space new media project' through Fueller's reading of Guattari's ecosophy (Fueller 2005) marks the "balance[ing of] the relationship between natural and built ecologies, between enclosure and access" (Wiehl, this issue) as precisely the stakes of the ethico-aesthetic. This transformed understanding of *participation* in recent discourses on participatory documentary which emerges through Wiehl's text and in line with Guattari's thought aims no longer at the *quantity* of participation, but is attentive to its *quality*, with the ultimate aim to foster the capacity for "co-creative action-taking" (Wiehl, this issue).

Furthering this engagement with non-fiction video and cinematographic practices in "our digital participative environments" (Hernández López, this issue), Gala Hernández López' contribution revolves around the notion of *common images,* which, drawing on Negri and Hardt's *Commonwealth* (2009), she understands not only as images that are common "goods to be shared, but also […] produced by *common* people." Following the rise of YouTube as a "bank of vernacular video," she sees the challenge posed by an ecology of common images "based on a constant, horizontal and democratised sharing" as the question of management and curation in a strongly centralised and algorithmically governed media-environment. Trying to remedy the partial failures in realising Guattari's post-media optimism, she stresses the critical attitude that pervades post-media practices by turning to post-Internet artworks. By drawing on examples from the works of Dominique Gagnon, Grégoire Beil, Shengze Zhu, Natalie Bookchin, and Penny Lane, Hernández López contrasts the avant-garde art of previous eras with post-media avant-garde. While the former relied on "*détournement* of the contents of the dominant and hegemonic mass media" (Hernández López, this issue), the latter appropriates vernacular content. What these practices reveal is a fundamental difference between the *appropriation* and the *adoption* of common images.

Continuing the engagement with contemporary media practices, Markus Spöhrer moves us from interactive documentary and non-fiction video practices to digital audio gaming assemblages, which he approaches as "specific forms of democratic design, development and distribution" (Spöhrer, this issue). Focusing on audio-games reveals a deep-rooted and, given his fascination with *Radio Alice*, perhaps surprising ocularcentrism in Guattari's position, while the seamlessness of the blend between Guattari's language and the discourse around accessibility and dis/ability nevertheless affirms its analytical potential in describing processes of participation through molecular alternative practices of blind players. Posing the question of (in)accessibility as one of participation, Spöhrer's inquiries are attentive to both the hindrances in "participating in digital gaming activities" as well as the "participative possibilities for amateurs in

the production, distribution and reception of aesthetic media" (Spöhrer, this issue). Spöhrer subtly revises Guattari's attack on mass-media by not addressing some vague and general notion of a homogenising mass-media but by zooming in on it in terms of its visual primacy. In doing so, he becomes not only attentive to the often-neglected economic dimension of the reappropriation of post-media but also follows the overall theme of closely connecting the aesthetic with the political aspects of Guattari's work.

Urs Humpenöder equally connects the political and the aesthetic aspects of Guattari's post-media ideal. He does so by analysing post-media at the intersections of Guattari's notion and Hans Magnus Enzensberger's ideals of emancipatory media practices. By turning the theory onto its practical aspect (see also Denecke, this issue) Humpenöder contemplates the aesthetic, artistic works of Wachter and Jud. He concludes that the reappropriation of the public sphere through post-media practices could make the public sphere public again, rather than occupied by private companies and their economic interests. Humpenöder thus links the ethico-political aspects of this special issue with the aesthetical aspects of Guattari's thought which are connected by an artistic activist's twist: For Guattari, it is the political sphere that is aesthetic, and vice versa. This virulent point of his philosophy becomes visible when viewing aesthetic and artistic practices through the lens of post-media thought. It is within the participation in the occupation of the public sphere via aesthetic practices that we see the ethico-political claims of the programmatic conceptualisation of post-media at work.

The becoming-producers of individual subjects and singularised multitudes involved in – amongst others – media practices has been described throughout the academic literature (Bröckling 2007, Foucault 2008, Negri/Lazzarato/Virno 1998, Reckwitz 2020). Not every assessment of this change in the modes of production is as enthusiastic or hopeful as Guattari's. Out of this wide range of conceptual writings emerged such critical terms as 'cognitive capitalism' (Boutang 2012, Fumagalli 2010, Lorey/Neundlinger 2012, Virno 2010, 1996) or 'creative city' (Reckwitz 2016, p. 155–184). One common topos amongst these critical analyses is the extension of working time to lifetime. Life and resistance in a micro-practical frame of participation according to those conceptions still requires constant work. Mathias Denecke joins this train of thought in his contribution. Through a close reading of Guattari's late texts, Denecke turns an argument by Zepke upside down. Zepke argues that "Guattari's affirmation of aesthetic creation as the contemporary paradigm of political resistance draws on the Italian autonomia movement's struggle for autonomous production, but his interest in art and artists clearly departs from autonomia's emphasis on the worker and work as the subject and site of revolutionary practice" (Zepke 2011, p. 205). Denecke similarly searches for a way to better understand practices of gaining control over mass media via the production of subject groups. "Media are the condition of the possibility of change, which must be facilitated by practices", he notes (Denecke, this issue). But the act of finding the right practices to do so as well as the practices themselves require constant work. This work, as Denecke reads it, is both political action and academic discourse, as post-media like utopia still requires "permanent work and a programme

that constantly questions itself". Therefore, Denecke returns to tactics and practices of groups and actors in the legacy of autonomia to show that the subjects of revolutionary practice in the aesthetic paradigm remain bound to work.

The contributions collected in this issue attest to the continued need to remain attentive to the shifting forms of political and artistic participation and their multiple re-valuations since 1968. Instead of proposing a theory of media which facilitates and shapes forms of participation, post-media emerges first and foremost as a question of participation, which is itself 'medial'. This framing allows the question of post-media to be re-situated in our current condition through a range of issues from video games to YouTube and the global pandemic.

Bibliography

Clemens Apprich / Josephine Berry Slater / Anthony Iles / Oliver Lerone Schultz (Eds.): *Plants, Androids and Operators: A Post-Media Handbook*. London 2014.

Clemens Apprich / Josephine Berry Slater / Anthony Iles / Oliver Lerone Schultz (Eds.): *Provocative Alloys: a post-media anthology*. London/Lüneburg 2013.

Yann Moulier Boutang: *Cognitive Capitalism*. Cambridge 2012.

Ulrich Broeckling: *Das unternehmerische Selbst: Soziologie einer Subjektivierungsform*. Frankfurt am Main 2007.

Andreas Broeckmann: *"Postmedia" Discourses. A Working Paper*. 2014, pp. 1–11.

Christoph Brunner / Roberto Nigro / Gerald Raunig: Post-Media Activism, Social Ecology and Eco-Art. In: *Third Text*, 27 (1), 2013, pp. 10–16.

Benjamin Coriat: *Penser à l'envers: travail et organisation dans l'entreprise japonaise*. Paris 1991.

Patrick Crogan: Video Games, War and Operational Aesthetics. In: Joanna Bourke (Ed.): *War and Art: A Visual History of Modern Conflict*. London 2017, pp. 324–329.

Gilles Deleuze: *Desert Islands and Other Texts. 1953–1974*. Los Angeles 2004.

Gilles Deleuze / Félix Guattari: *A Thousand Plateaus*. Minneapolis/London 1987.

François Dosse: *Gilles Deleuze & Félix Guattari: Intersecting Lives*. New York 2010.

Wolfgang Fach: Partizipation, in: Ulrich Bröckling / Susanne Krasmann / Thomas Lemke (Eds.): *Glossar der Gegenwart*. Frankfurt am Main 2006, pp. 197–204.

Michel Foucault: *The Birth of Biopolitics: Lectures at the Collège de France, 1978–1979*. London 2008.

Matthew Fuller: *Media ecologies: materialist energies in art and technoculture*. Cambridge 2005.

Andrea Fumagalli: The Global Economic Crisis and Socioeconomic Governance. In: Andrea Fumagalli / Sandro Mezzadra (Eds.): *Crisis in the Global Economy: Financial Markets, Social Struggles, and New Political Scenarios*. Los Angeles / Cambridge 2010 (Semiotext(e) Active Agents Series), pp. 61–84.

Gary Genosko: The Promise of Post-Media. In: Clemens Apprich / Josephine Berry Slater / Anthony Iles / Oliver Lerone Schultz (Eds.): *Provocative Alloys: a post-media anthology*. London/Lüneburg 2013, pp. 14–25.

Michael Goddard: Félix and Alice in Wonderland: The Encounter Between Guattari and Berardi and the Post-Media Era. In: Clemens Apprich / Josephine Berry Slater / Anthony Iles / Oliver Lerone Schultz (Eds.): *Provocative Alloys: a post-media anthology*. London/Lüneburg 2013, pp. 44–61.

Richard Grusin: *Premediation: Affect and Mediality After 9/11*. London 2010.
Félix Guattari: Regimes, Pathways, Subjects. In: Jonathan Crary / Sanford Kwinter (Hg.): *Incorporations*. New York 1992, pp. 16–35.
Félix Guattari: *Chaosmosis: An Ethico-Aesthetic Paradigm*. Bloomington 1995.
Félix Guattari: Towards A Post-Media Era. In: Clemens Apprich / Josephine Berry Slater / Anthony Iles / Oliver Lerone Schultz (Eds.): *Provocative Alloys: a post-media anthology*. London/Lüneburg 2013, pp. 26–27.
Félix Guattari: Entering the Post-Media Era. In: Sylvère Lotringer (Ed.): *Soft Subversions: Texts and Interviews 1977–1985*. Los Angeles & Cambridge 2009a, pp. 301–306.
Félix Guattari: I Am an Idea-Thief. In: Sylvère Lotringer (Ed.): *Soft Subversions: Texts and Interviews 1977–1985*. Los Angeles / Cambridge 2009e, pp. 21–32.
Félix Guattari: Institutional Intervention. In: Sylvère Lotringer (Ed.): *Soft Subversions: Texts and Interviews 1977–1985*. Los Angeles & Cambridge 2009b, pp. 33–63.
Félix Guattari: Postmodern Deadlock and Post-Media Transition. In: Sylvère Lotringer (Ed.): *Soft Subversions: Texts and Interviews 1977–1985*. Los Angeles / Cambridge 2009c, pp. 291–300.
Félix Guattari: So What. In: Sylvère Lotringer (Ed.): *Soft Subversions: Texts and Interviews 1977–1985*. Los Angeles / Cambridge 2009d, pp. 64–80.
Félix Guattari / Antonio Negri: *New lines of alliance, new spaces of liberty*. London/Brooklyn 2010.
Michael Hardt / Antonio Negri: *Labor of Dionysus: a critique of the state-form*. Minneapolis 1994.
Erich Hörl / Mark B. N. Hansen: Medienästhetik: Einleitung in den Schwerpunkt. In: *Zeitschrift für Medienwissenschaft* 8, 2013, pp. 10–17.
Isabell Lorey / Klaus Neundlinger: *Kognitiver Kapitalismus*. Vienna 2012.
Robert Lumley: *States of Emergency: Cultures of Revolt in Italy from 1968 to 1978*. London 1990.
Brian Massumi: *Ontopower: war, powers, and the state of perception*. Durham 2015.
Philippe Mengue: *Gilles Deleuze ou le système du multiple*. Paris 1994.
Antonio Negri / Maurizio Lazzarato / Paolo Virno: *Umherschweifende Produzenten: Immaterielle Arbeit und Subversion*. Mannheim 1998.
Roberto Nigro: Wie verändert sich Kunst, wenn sie zur Tätigkeit ohne Werk wird? In Judith Siegmund (Ed.): *Wie verändert sich Kunst, wenn man sie als Forschung versteht*? Bielefeld 2016, p. 199 – 2014.
Taiichi Ohno: *Toyota Production System: Beyond Large-Scale Production*. Cambridge 1988.
Jacques Rancière: *Le Partage du sensible. Esthetique et politique*. Paris 2000.
Andreas Reckwitz: *Das hybride Subjekt. Eine Theorie der Subjektkulturen von der bürgerlichen Moderne zur Postmoderne*. Frankfurt am Main 2020.
Andreas Reckwitz: *Kreativität und soziale Praxis: Studien zur Sozial- und Gesellschaftstheorie*. Bielefeld 2016.
Marco Revelli: *Lavorare in Fiat*. Milan 1989.
Marco Revelli: Worker identity in the factory desert. In: *Radical Thought in Italy: a potential politics*. 1996, pp. 115–122.
Paolo Virno: Notes on the «General Intellect». In: Saree Makdisi / Cesare Casarino / Rebecca E. Karl (Ed.): *Marxism beyond Marxism*. New York 1996, pp. 265–272.
Paolo Virno: The Ambivalence of Disenchantment. In: Paolo Virno / Michael Hardt (Ed.): *Radical Thought in Italy: A Potential Politics*. Minneapolis 2010, pp. 13–36.
Stephen Zepke: From aesthetic autonomy to autonomist aesthetics: Art and life in Guattari. In: Eric Alliez / Andrew Goffey (Ed.): *The Guattari Effect*. London 2011, pp. 205–219.

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"Hear the Difference". Audio Game Prosumer Communities in a Postmedia Context

From Audyssey to Audiogames.net

1 Introduction

Accessibility, though largely unrecognised by supposed 'abled persons', is a "central concept in human life" (Greco 2019, p. 16) that encompasses literally and virtually all areas of social practice. In the last two decades, accessibility has become a widely discussed issue in contemporary sociopolitical, philosophical, pedagogical, technological and design-oriented discourse as well as corresponding academic research – especially in relation to the concept of 'disability' (cf. eg. Jaeger/Bowman 2005; Alphin/Lavine/Chan 2017; Greco 2019). The issues of 'inaccessibility' in private everyday life, work and the 'public' sphere mainly address participation in a wide range of social activities. Through the establishment and development of 'New Media', digital games and gaming communities have become part of the dominant pop-culture and a profitable market. Both the market and developers are faced with accessibility issues in that video games describe problems for the average human, whose physiological and sensory constellation does not reflect the 'idealized bodies' (cf. Parisi 2011; Redden 2018) that the hegemonic gaming dispositive implies. Mass-marketed digital games in this respect, "are tools, not only of communication, but also for the modelization of individuals" (Guattari 2009 [1996], p. 47): In order to play a conventional game, players require the sensory capacities of sight (primarily) and hearing (secondarily), one or two hands to perform specific bodily techniques of digital gameplay (cf. Parisi 2011) and sensorimotor and cognitive skills in order to respond to the interactive cues of the game software. In this respect, in Felix Guattari's sense, digital games serve as normative models for the production of equivalence (cf. Genosko 2013, p. 10) of individuals as a form of subjectification in relation to specific, socio-technically modeled and normed arrangements. Within the last decade, much sociopolitical and academic concern has been uttered regarding the exclusion and marginalisation of players who do not live-up to the normative requirements digital game arrangements prescribe (cf. e. g. Kent/Ellis 2011, p. 113–147). Accordingly, the

gaming industry as well as academic research looked to supposedly disabled minority groups in order to create and promote concepts that allow for 'accessibility' to digital gameplay, thus creating new target audiences and economical niches that are subject to capitalist exploitation. With the introduction of concepts such as a presumed 'universal accessibility' (cf. e. g. Stephanidis 2009), a trend is recognisable towards an appropriation of (economically excluded) minority groups and a reintroduction of technologies of equivalence, normalisation by "capitalist regimes" (Goddard 2013, p. 49) and a subsequent suppression of alternative subjectivities.

Felix Guattari's arguments for post-media practices were decisively directed at countering such capitalistic top-down processes of mass-singularisation, especially considering the availability of contemporary media technologies that provide the possibility for autonomous and individual subjectification and related micropractices:

> The machinic production of subjectivity can work for the better as for the worse. At best, it is creation – the invention of new universes of reference; and at its worst, it is the mind-numbing mass mediatization to which billions of individuals today are condemned. Technological evolutions, combined with social experimentation in these new areas, will perhaps be able to lead us out of the oppressive present moment and into a 'post-media' era, which would be characterized by a reappropriation and a resingularization of the use of the media (access to data bases, videotheques, interactivity between protagonists, etc.).
>
> *(Guattari in Genosko 1996, p. 194)*

In this paper, I will make an effort to elaborate on such counter-hegemonic micropractices of reappropriation and resingularisation by describing two cases of blind gaming communities and their distribution of 'audio games'. Audio games, sometimes called 'audio-only-games',

> […] highlight and implement 'audio' as the major narrative, ludic and interactive element and thus foreground auditory perception as a main condition for 'playing the game'. Instead of creating a ludic space by use of a graphical interface, these games' gameplay, immersive quality and interactive situation are conditioned by what can be described as "auditory interfaces" […]. *(Spöhrer 2019, p. 89).*

In this respect, audio games address auditory perception and interaction with the digital game affordances, which usually are considered to be secondary in digital gaming. As I will describe in this chapter, digital gaming is regulated by a visual primacy and the corresponding normative sensory regime of playing, comprehending and interacting with the game by use of the eyes. This primacy constitutes a paradigm that produces 'normal' gaming subjects as seeing and sighted and is highly related to capitalist modes and practices of production, distribution and advertisement. In the same manner, the occularcentric hegemony that is conditioned by this primacy constructs,

degrades and configures non-sighted players and 'playing with sound' as disabled or a 'disabling practice', respectively (cf. Schillmeier 2007). While audio games have gained some attention in the gaming economy during the last few years, they are still considered to be a (non-profitable) marginal phenomenon that target minority audiences. However, by use of the possibilities of digital online media and information systems, during the last two decades subcultural blind gaming communities, amateur developers and distributors have established trade networks, audio aesthetics and game mechanisms for audio gaming. I will focus on these communities in this paper.

Consequently, this article does not analyse digital gaming assemblages in the sense of "post-media art" (e.g. cf. Quaranta 2011), although this may also be possible[1], but as specific forms of democratic design, development and distribution of digital gaming media that are fundamentally conditioned by the availability and accessibility of the World Wide Web. I will provide one historic example of an autonomous, bottom-up production and distribution community for audio games, the Audyssey Magazine (1996–2006), and one contemporary example, Audiogames.net, which represents a transformation of the partly 'predigital' means of logistics, communication and audio game distribution into a "collective assemblage of enunciation" (Goddard 2013, p. 47) that is relatable to Guattari's vision of the post-media area and practices.

2 Audio Games and Audiogame.net

2.1 Audio Games: A Short Historical Introduction

In the first issue of Audissey, which was published online between 1996 and 2007, "the oldest gaming magazine for people interested in games that are accessible to people who are blind" (Feir 1996), its creator and editor Michael Feir summarised the status quo of digital games and gaming as follows:

> What's life without a little fun? Just as life would be incomplete without its pleasures, computers, in my opinion, are incomplete without games. To find such entertainment, sighted people need only look as far as their local computer store. There, they can expect to find high-quality commercially developed games. Should they need some guidance as to which games are worth their time and money,

1 Digital games are technologically conditioned by computer hard- and software, a "meta-medium" (Robben 2006, p. 296) that is capable of translating, emulating, simulating and conflating a variety of different, (presumably) distinguishable media. Thus, in the post-media sense, digital games are "multimedia" (Manovich 2001, p. 3), combining and transforming practices, aesthetics and materialities of predigital cultural production and therefore resist the "traditional concept of medium" (ibid.). In a more critical sense, one could argue that "[a]s a central co-ordination machine, the computer subjects all old media to the digital regime" (Adilkno 2013, p. 66).

> they may look to a variety of magazines, friends, and salespeople for advice. For the blind person, solving the problem of finding a game is a harder proposition. Games must not only suit the interests, levels of patience, and intellectual levels of their players, but must also fulfil another requirement of being accessible to speech synthesizers or braille display devices. Added to these difficulties is the dismal fact that commercial companies are not interested in tapping into the relatively small market of blind computer users who would buy. *(Feir 1996)*

More than two decades ago the issue of accessibility to digital games for players with non-normative sensory or bodily capacities was not as present in mainstream technology or academic and sociopolitical discourse as it has become today. The gaming industry was neither interested or even aware of this target group, nor was popular discourse as concerned with blind or deaf players or those with sensorimotor or cognitive disabilities and other physiological or sensory characteristics that prevented them from participating in digital gaming activities. Only a few popular games had accessible features for blind players and sighted players alike. One early example is the memory game Touch Me (Atari 1974), an arcade gaming device that was released in 1978 as a portable version for the home console market. The device could be used as both an audio-only game or a visually supported game. The portable Touch Me was a small device that played a series of tones, accompanied by correspondingly flashing lights in different colors, which had to be memorised and repeated by the players (either by sight or hearing) and was thus "simple enough that it could be played by people as a pure audio game" (Kirke 2018, p. 66). However, I doubt that the device was developed by Atari with blind players in mind, as the original arcade flyer advertises it as a game that "challenges the eye-to-hand coordination skills" (Atarimuseum 2020) and thus focuses on the audio-visual aspects of the game. This example can be seen as both a "strategic" appropriation and recontextualisation of popular media by blind persons (cf. de Certeau 1988, p. 19ff) and a corresponding translation of techno-sensory disposabilities rather than tapping into an economic target audience. In the 1990s, accessible games for blind players were almost exclusively versions of so-called "interactive audio books", auditory narratives with non-linear plots that allowed the listeners to make choices at crucial points in the story and influence the narrative sequences (cf. Röber et al. 2006). However, this genre does not necessarily fit everybody's tastes in gaming, especially as it does not require the typical sensorimotor and specific ear-to-hand-coordination skills of fast-paced platformer or shooter games. Also, according to Feir "their [interactive audio book's] one serious drawback is their general lack of replay value" (1996). One might even ask the question, whether these games, with their strong focus on narrative, passive listening and scarce interactive moments, actually qualify as ludic media at all (cf. Spöhrer 2019, pp. 92–93). Interestingly enough, the first commercial Audio Game that was decisively directed at a blind audience was Real Sound: Kaze no Regret for the Sega Saturn (Warp 1997). It was released for the home console market in 1997, just one year after the first issue of Audyssey (cf. Kirke 2018, p.66). This interactive

audio book released exclusively in Japan, which included a braille instruction booklet, featured a narrative that was solely represented by the spoken voices of voice actors and supported by an atmospheric musical score. The game decisively dismissed graphical elements altogether. Kaze, however, could not compete economically with other contemporary video game titles and to this day remains at best a collector's item due to its "curiosity" (cf. Feir 2018). One of the reasons, why such a concept was not financially successful is the fact, that it was an exclusive title for the Japanese Sega Saturn (and later the Dreamcast in 1999), a home console that was outsold by the leading competitors Nintendo 64 and Sony Playstation by 1997 (cf. Finn 2002). In addition to this, in the 1990s, video game consoles were marketed with a strong focus on the ever-improving hardware technologies and especially highlighted the superiority of up-to-date graphics. In this respect, Kaze no Regret did not fit the visual primacy of digital gaming and the normative sensory regime of playing, comprehending and interacting with the game using the eyes. While nowadays a plethora of different visual aesthetics coexist, each inhabiting a different economic niche (e. g. retro graphics or intentionally 'bad' visuals), video games have been marketed according to their visual superiority since the 1970s. This is for example evident in the historical 'bit war' between Sega and Nintendo, where producers made an effort to outnumber their competitors by increasing the number of 'bits' (8, 16, 32, 64 bits) in every new console, supposedly leading, as implied in advertisements, to enhanced graphics. Consequently, developers mostly reserved the memory/space capacities of the consoles for visual rather than auditory features of games (cf. Fritsch 2013, p. 24). Impressively, 'realistic' graphics were the main selling point. Lastly, considering, Michael Feir's introduction to Audyssey, the target group of blind people was probably tired of the genre of digital audio books (cf. 1996). While Kaze no Regret might have been a curiosity for sighted players, despite its interesting, high quality narrative, it probably was not a novelty to blind players, especially as far as the reduced game mechanics were concerned. And, as Michael Feir's editorial to the first issue of Audyssey states, there was rather a need for games that used the auditory elements of digital games as means of interaction, rather than mostly 'passive' narrative purposes.[2] Or to put it differently: the target (blind) audience desired products in the tradition of ludic media rather than those "contextualized in a literary tradition" (Spöhrer 2019, p. 93). However, as these examples show, the production, distribution of and more generally: the access to digital games and the consequent subjectification of 'sensing' users was regulated by capitalist practices (and still is to a large

2 I'm aware of the fact that concepts such as 'passive' and 'active' are problematic in relation to media use and I would argue, as I have done before (cf. Spöhrer 2019, p. 93), that there is no such thing as 'passive media' or 'passive media consumption', since "[c]ognitive, perceptual and emotional involvements that are conditions for reading books or watching films are not less 'active' than handling a game controller or responding to visual, auditory or tactile cues" (ibid.). In a sense, each media involves interactive processes as it comes to sensory and bodily involvement. However, here, the term 'passive' refers to a heuristic to describe specific degrees of interactive qualities: "I choose to consider *Kaze*'s gameplay and interactive situation as a mode of 'slow-playing', a deliberate aesthetic- and gameplay-design choice that creates a comparably lower frequency of interactive prompts" (ibid.).

degree). Guattari in 1990s envisioned the "digitisation of the television image" that will "soon reach the point where the television screen is at the same time that of the computer and the telematics receiver" (2013 [1990], p. 27). We can attest today, that contemporary digital media ecologies have evolved into such a state of coinciding of sender and receiver, of output and input channels, for at least over a decade now, with the introduction and establishment of smart devices.[3] However, despite Guattari being fascinated with the potentials of radio (cf. 2009 [1996], pp. 45ff; cf. Goddard 2013), this quote shows that the ocularcentric position is deeply rooted in (post)modern thought. Guattari, following the visual primacy of mainstream media, thought of the post-media area as one that is conditioned by visual communication rather than by the potentials of auditory social communication (which is basically correct up to this day). According to Stephanie Boluk and Patrick Lemieux (2017) especially computer-based (digital) technologies have even intensified this fixation on visuals:

> Art historian Martin Jay (1988, 2, 6) describes this "resolutely ocularcentric" focus on the "alleged objective optical order" as one of the "scopic regimes of modernity," and the use of computers has only intensified the drive to produce a mathematical, rationalized space that translates three- dimensional objects onto two- dimensional screens. How has this ocularcentric conflation of graphics and realism become a fixed point around which the standard metagame orbits? Why is the ideological avatar of play so resolutely focused on the visual? Is there a non-visual, non- video game hovering somewhere in the blind spot of twenty- first century play? *(p. 131)*

The notion of visual realism is not only a common topic in video game advertisements, political discourses on the effect of video games on social behavior[4] or video game journalism (e. g. video game reviews). Obviously, this is also true for writings in academic discourse, as for example Sebastian Felzmann's (2010) historical account of video game graphics shows. He argues for a teleological development of visuals from mere abstractionism to photorealism as the central motive in video game development. If the latter existed in this trivialised from, it was a specific form of restricted mainstream discourse that was conditioned by neoliberalist and capitalist agendas (marketing, competition, progress). Not only then, "[is it] through the media that capitalism articulates itself" (Slater 2013, p. 37), but it is also capitalist practices regulating, restricting and configuring the dispositives and discourses of a mainstream sensory regime. From this perspective, video games – in the literal, etymological sense of the word: 'video' (Latin for "I see") – are elements of a hegemonic sensory apparatus (cf. Apprich 2013, p. 127).

3 However, this does not imply that power relations are evenly distributed, and it does not imply that smart devices are perfectly democratic technologies that abandon hierarchical power structures per se.

4 During the last decades, shootings in schools or other public places were frequently related to young people playing violent video games with "photorealistic graphics" (cf. Markey 2016, pp. 356–357).

2.2 Audyssey as an Intervention in Visual Regimes: Molecular Alternative Practices

As the example of Kaze no Regret shows, developing and releasing an audio-only game, can be considered risky business in this economic milieu. Governed by a mainstream of digital game manufacturers that fortified the visual primacy of digital games and a sighted target audience, a reliance on hearable stories and interactive cues seemed to be an unmarketable concept. Analogous to Félix Guattari's (2013 [1990]) concerns about television in the 1970s, mainstream digital gaming discourse, beginning in the 1970s, enforced "the modelling of subjectivity according to prevailing [sensory] patterns, normalizing political pressure [and] the concern to keep singularising ruptures to a minimum" (2013, p. 27. Additions by MS). In Guattari's vision, "[p]ost-media signifies resistance to these factors and the active 'aesthetic' reappropriation of the production of images, and of audiovisual production, and becoming heterogeneous of homogenetic subjectifications" (Genosko 2013, p. 18). A condition that, as I will show, is met by amateur networks for audio game exchange.

In a sense, this (probably trivialised) historical scenario, while restricting blind players' access to digital games, gave rise to "Molecular Alternative Practices" (cf. Guattari 2013 [1990], p. 27) among blind players. This media environment maybe comparable to Guattari's prime example of Radio Alice:[5]

> It was not just a question of giving space for excluded and marginalised subjects such as the young, homosexuals, women, the unemployed and others to speak but rather of generating a collective assemblage of enunciation allowing for the maximum of transversal connections and subjective transformations between all these emergent subjectivities. *(Goddard 2013, p. 47)*

The communities' appropriation of the hardware and software tools provided by the 'digital revolution' made practices of "de-centring the hegemony of the mass media" (Goddard 2013, p. 45) possible in terms of the visual primacy. The progressing accessibility of the Internet in the mid-1990s[6], the advancement of soft- and hardware and the

5 Molecular practices are considered to be a matter of scale. Instead of acting, deconstructing, distorting, transforming and destroying on the macro level, molecular practices work on a micro level and aim at "reject[ing] hierarchical top down structures of information transfer and broadcast in favour of laterally conjoined moments of exchange" (Kinsey 2013, p. 75). In this respect, molecular practices can be considered strategies of practicing and offering alternative structures acted out in the course of everyday life. In fact, these practices do not need to follow a conscious political agenda per se, but instead can be measures of translating specific life styles, finding comfortable solutions to problems and nuisances of everyday life or accommodating to barriers posed by the (subjective) assemblages of 'living one's life'. Their effects, however, may well be political once these practices affect lives on a larger scale.

6 However, accessibility in relation to web-technologies is an entirely different problem, as both computers and software as well as webpage design need to be adapted to the bodily and sensory abilities of blind users (e. g. via screen-readers, text-to-speech, reduction of visual complexities of webpages) (cf. Lambert

availability of knowledge in information and communication technology not only "lead to the power of Big Brother" meaning the fortification and establishment of hegemonic capitalist sensory regimes, like Guattari prognosed (2013 [1990], p. 27). This new media ecology also allowed for blind players to establish subcultural information and distribution networks for accessible gaming and alternative models of sensory subjectification, thus promoting "new forms of sensibility and sociability, the very intangible qualities constitutive of both the molecular revolution and the post-media era" (Goddard 2013, p. 47). Naturally, instead of the digitisation of (television) images (cf. Guattari 2013 [1990], p. 27.), audio game developers profited from the availability of the advancing hard- and software technologies for audio creation. Digital audio processing, manipulation, recording and sampling content were available online as well as the respective (expert) knowledge. In addition to this, online databases show a massive presence of user-generated content that can be used free of charge and can provide the basis for audio game soundscapes. Admittedly, Audio games were most certainly developed and distributed by amateur software designers on a subcultural level even before the existence of the Internet. Audiovisual games were appropriated and modified for blind gaming as early as the 1970s, when home computers were affordable and available to the common consumer. Nevertheless, networking structures of the World Wide Web facilitated reaching beyond the subcultural and localized blind communities, analogous to Guattari's prognosis for the "post-media era": A "collective-individual reappropriation and an interactive use of machines of information, communication, intelligence, art and culture" (Guattari 2013 [1990], p. 27). In this respect, audio games are certainly the result of the complex relationships between emerging media technologies and changing amateur media practices (cf. Motrescu-Mayes, Aasman 2019). The latter is an important factor, especially in Guattari's thought, since Guattari highlighted the micropolitical uses of new media technologies, rather than hailing progressing technology itself (e. g. cf. Goddard 2013, p. 48): "We cannot expect positive repercussions from new technologies unless these technologies are adopted by way of individual and collective creative practices" (Guattari in Genosko 2013, p. 19). The notion of the (horizontal) participative possibilities for amateurs in the production, distribution and reception of aesthetic media, also plays a major role in Peter Weibels conceptualisation of post-media art:

> In the post-media condition, we experience the equality of the lay public, of the amateur, the philistine, the slave and the subjects. The very terms of 'user innovation' or 'consumer generated content' bear witness to the birth of a new kind of democratic art in which everyone can participate. *(Weibel in Broeckmann 2017)*

2005, p. 255). In a sense, the corresponding practices of enabling accessibility to the World Wide Web via use of, oftentimes customised, media technologies can be considered a strategic, micropolitical practice, too. However, this is not necessarily a 'bottom-up' practice, since nowadays there is an extensive market for assistive technologies that seek to generate "consensual subjectivity" (cf. Goddard, 2013, p. 47).

One example for such a creative network of blind amateur users, or more precisely 'produsers', developing, distributing and discussing accessible games is the Audyssey Magazine mentioned in the introductory quote of this paragraph. Founded by Michael Feir in 1996, in the early days of the Internet, it was "dedicated to the discussion of games which, through accident or design, are accessible to the blind either with or without sighted assistance. Audyssey Magazine provides news, reviews, tips, and discussion of games" (Audiogames.net 2020). The accidental accessibility features hark back to the early appropriation and recontextualisation of Touch Me, which was a distinctive step towards disrupting the normative use of digital games and a rearrangement of ocularcentric gaming practices through online and digital media. Game magazines usually reviewed and discussed digital games from an ocularcentric perspective, meaning that the games were categorised, described and judged in terms of their graphics (and less importantly their sound), and the interactive cues and game mechanics were, for the most part, related to the visual design of the game. As server capacities and down- and upload speed was not yet as convenient as today, Michael Feir functioned as a localised receiver and distributor for auditory accessible software, that could be sent in on floppy disks:[7]

> I do not intend for this magazine to serve forever as my pulpit. Issues will be published on a bimonthly basis, on or about the fifteenth of the month. All submissions must be sent to me in standard Ascii format either on a 3.5-inch floppy disk, or via e-mail to my Compuserve address. I will give my home address and my Compuserve address at the end of the magazine. I will also be happy to accept any games or information on them which my readers might have. Although I have amassed a sizeable collection of accessible games, I am always on the look-out for new ones. Send any games on a 3.5-inch disk in a self-addressed mailer so that I can return your disk or disks to you once I have copied their contents onto my hard drive. Please only send shareware or freeware games. It is illegal to send commercial games. By sending me games, you will do several things: first, and most obviously, you will earn my gratitude. You will also ensure that the games you send me are made available to my readership as a whole. As a further incentive, I will fill any disks you send me with games from my collection. No disk will be returned empty. *(Feir 1996)*

This practice of amateur knowledge exchange incorporated elements of the predigital "trade cultures": From the early 1980s to the 1990s localised, subcultural groups of hackers, private game collectors or members of the "demo scene" (see Bolz 2011) distributed hacks and cracks of copy protections, audiovisual demos and (illegal) raw copies

7 Interestingly, Guattari envisioned the use of disks in a similar way, when "he mentioned that compact disks (rewritable media in general), cell phones, satellite television, television tuner cards for PCs, access to new databases – indeed, many then new 'technological mutations' could be used to enhance personal programming" (Genosko 2013, p. 18).

of games on floppy disks or CD-Roms as a means of countering capitalist exploitation.[8] Audyssey's appropriation and transformation of the infrastructures of trade cultures combined with online distribution certainly fits Guattari's thoughts on post-media interconnectivity: Guattari

> [...] sensed that media interconnectivity could have positive effects by developing new collective sensibilities. Guattari intuited that this would lead to minoritarian becomings linking local and regional upheavals to planetary problematics, suggesting the ways in which Web activism would come to cross constituences and organise on-and off-line actions. *(Genosko 2013, p. 19)*

However, being reliant on personal contacts, material availability and often lacking proper logistics, these subcultures were locally restrictive and rather close-knit. In addition, such practices were mostly direct cases of copyright infringements that lead to penalties or even prison sentences. In the case of Audyssey, the common agenda was to find alternative and legal ways of bypassing and intervening in the visual primacy of the video game dispositive. By avoiding emphasising "the pernicious ideology of equivalence fostered within the discourses of postmodernism and constitutive of the structures of late capital" (Kinsey 2013, p. 72) and by abandoning "its normalising and pressurising tendencies" (ibid.), the Audyssey community provided a basis for cultural and social practices and sensory modes of inequivalence. This can be considered a form of 'soft subversion' in the Guattarian sense, who argued "that capitalist production not only manufactures commercial goods, but also institutions and infra-individual mechanisms, systems of perception, of behavior, of imaginary representation, of submission to hierarchies and dominant values" (2009 [1996], p. 47). With focus on the interrelation of aesthetic media, systems of perception and related techno-sensory practices, this quote can be considered an appropriate description of the fundamental dispositive elements that condition visual primacy.

Michael Feir functioned as a kind of "spokesman", a mediator for the Audyssey network, and therefore constitutes a central node as "to express in one's own language what others say and want, why they act in the way they do and how they associate with each other: it is to establish oneself as a spokesman" (Callon 1986, p. 223). This is certainly a mode of empowering groups that have been marginalised by the ocularcentric regime and that in the video game mainstream do not have a place and a representative voice to enunciate their agendas or establish and elevate their "central signifiers and models of perception" (Slater 2013, p. 40). The Audyssey network was a step toward Howard Slater's (and of course Guattari's) concept of post-media activity, highlighting an auditory paradigm instead of a visual one and promoting "abnormal rather

8 By the mid-1990s, these trade networks were supported by so-called LAN-parties, in which different private personal computers were connected via LAN cables, which provided for a local network for larger file sharing and the exchange of larger amounts of data.

than normalising forms" of gameplay, affirming "those subjects and projects that are omitted" (ibid. 41) by mainstream digital gaming discourse. The magazine thus functioned as a semi-open, but channel-like platform that was not oriented towards capitalist goals, but instead sought to reinvent, recompose and transmute the usage of cultural objects in a non-dogmatic and non-programmatic manner (cf. Guattari 2009 [1996], p. 306). Although it might appear so, Michael Feir did not develop the magazine's concept as an explicit political agenda, at least not to my knowledge. By no means is the magazine's rhetoric directed towards a cultural or social "upheaval" (Genosko 2013, p. 19), although it can thoroughly be viewed as a form of 'Web activism', especially as far as the politics of subjectivation is concerned. To Feir, digital games are an access to leisure activities for blind people and the expression of a passion for digital technology and gameplay. At best, as he states in the first issue, games can be a personal tool for self-discovery and education as a subjectifying practice: "As a traveller may gain a deeper understanding of the world and its people, so the gamer may gain a deeper understanding of the world, him/herself, and his/her fellow player" (Feir 1996). However, it can be argued that there is an implied sociopolitical message in the concept of the magazine. The highlighting, discursivation and rearrangement of the paradoxically 'invisible' visual regime and the dismissal of the ocularcentric structures of digital games paved ways for "a transformation of classical media structures towards new collective assemblages of enunciation" (Apprich 2013, p. 123). 'Seeing' and the 'visual' are stabilised as the 'norm', the 'normal' mode of perception and the common (ocularcentric) aesthetic, and they are fortified by normative sensory practices that, in order to foster stability, need to remain invisible, unchallenged and indefeasible: "While normality remains the stabilized, invisible black box, disability becomes visible in its instability and at the same time becomes a stabilizing factor for normality" (Spöhrer 2013, p. 27). However, for the 'produsers' of Audyssey, visual features are deconstructed and highlighted as inaccessible, perceptually not pleasing or not useful. Quite literally to blind gamers the visual attributes of digital games are not even existent as a perceptual phenomenon (although certainly as a discursive one that regulates sensory practices of normalisation). The mode of visual perception as a premise for digital gaming, then, is a sociotechnical limitation of self-expression, self-discovery and access to a "deeper understanding of the world and its people" (Feir 1996).[9] In this respect, the visual primacy of digital gaming becomes highly visible as a condition for "disabling practices" (Schillmeier 2007). Rendering visible the paradoxically 'invisible' visual condition of

9 The criticism implied in this description, is to be seen in contrast to the assumption of the medical model of disability with the idea that gaming technologies are elements of disabling practices that configure blind users as disabled. While medical models presuppose bodily and sensory deficits in the user, the concept of disabling practices instead locates the deficits in the sociotechnical arrangement. Blind YouTuber and gamer Steve Saylor formulates the problem of inaccessible gaming software as follows: "'When I started I thought being blind was just my niche differentiating myself from other gaming channels', Saylor said. 'At first my channel was just about how I sucked at video games. That was the comedy of it … but in 2017 I was invited to a conference by Ubisoft. I was on a panel with other people talking about their experiences. And I came to this realization: It wasn't that I sucked at games, it was that games sucked for me'" (Isador 2020).

gaming thus allows for it to be subjected to deconstruction and thus becomes part of a critical discourse. In the Audyssey community, each game – whether it is an audio-only game or a video game – is viewed, reviewed and used from the perspective of an auditory paradigm and thus can be considered an alternative "thought style" (Fleck 2011 [1953]). The community thus represents an enunciation of the constructedness, limitations and ideological relations that are related to the visual primacy:

> What matters is the criticism to which such an ideological complex is subjected by the first representatives of the new historical phase. This criticism makes possible a process of differentiation and change in the relative weight that the elements of the old ideologies used to possess. What was previously secondary and subordinate, or even incidental, is now taken to be primary – becomes the nucleus of a new ideological and theoretical complex. The old collective will dissolves into its contradictory elements since the subordinate ones develop socially, etc.
>
> *(Gramsci in Apprich 2013, p. 130)*

Rather than abandoning the hegemony of the visual primacy, Audyssey was a starting point for establishing awareness for blind gaming prosumers and for "promoting mutant singularities and new minorities" (Guattari 2009 [1996], p. 161). The auditory paradigm of blind gaming has certainly not become the dominant "ideological and theoretical complex" in mainstream culture, but still generated a discourse about these forms of subjectivication, from which alternative models of gamer subjectivities can be produced and discursified.

2.2.1 From Audyssey to Audiogames.net

Audyssey can certainly be described as a demonstration of new practices of subjectification and a discursivation of 'hearing' and 'playing with sound' as a counter-hegemonic mode of access to digital gameplay. However, in terms of post-media practices, the early blind gaming community was limited by the technological, social and logistic conditions of early Internet networking. I described Michael Feir's position in the network as that of a spokesman or, in the sense of Gayatri Chakravorty Spivak (1988), even as a "representative" for the oppressed. The latter, however, can be considered problematic as far as power relations are concerned since it means that the represented group's identity is subject to the specific media constellations that condition, regulate and channel the production of communication: These constellations are made up of both human (e. g. Michael Feir) and non-human (e. g. the representational mode of the magazine) elements, restrictions and translations that function as the representatives of this group, mediate and condense their interests in a single localizable knot (cf. Callon 1986).

After all, given the fact that in 1990s' online media environments did not yet provide for an easy-to-access infrastructure as is the case with Web 2.0, the Audyssey nevertheless was a fairly democratic means of soft subversion, especially as there did not seem to be any economic implications. Post-media subjectification, however, in a post-media area

for Guattari demands "innovative forms of dialogue and collective interactivity" and "the connection of banks of data through networking; [..] the multiplication to infinity of 'existential operators', permitting access to mutant creative universes" (2009 [1996], pp. 299–300). The first demand is certainly met as Audyssey provides an interesting and innovative mode of dialogue. Still, the channel-like structure and the clustered, mono-directional flow of communication is merely a precursor of the "collective interactivity" (cf. Guattari 2009 [1996], pp. 299–300) that is possible today. Especially sociotechnical restrictions of the network, that disabled the subsidence and the dispersal of sender and receivers, prevented it from being a truly democratic, bottom-up network. In a sense, Michael Feir's position as the central mediator, makes him an "obligatory passage point" (OPP) (Callon 1986) in this network, through which all the other readers and developers are subjected and communicate in order to enunciate their agendas. Feir was the only access point to the "mutant creative universe" of Audyssey until Audyssey featured other editors and thus distributed editorial and decisional agency. Feir's position as the OPP is not meant as a point of criticism. Moreover, Audyssey can thus be conceived as an assemblage of postmedia practices. According to Goddard, post-media constellations decisively rearrange monolithic representational power relations in order to establish networks of distributed agency. With reference to Guattari's example of Radio Alice, Goddard states:

> What this type of radio achieved most of all was the short-circuiting of representation both in the aesthetic sense of representing the social realities they dealt with and in the political sense of the delegate or the authorised spokesperson, in favour of generating a space of direct communication. *(Goddard 2013, p. 49)*

However, the logistic capacities and possibilities did not yet support large data exchange and Audyssey was not manufactured to allow for relatively open, 'direct' multivocal communication and prosumption as is the case with open-source databases, message boards and chats today. By Feir functioning as the OPP, and the central communicational channel of the magazine, the Audyssey community was barely automatised and so was socio-materially and locally restricted to the agencies of a few human actors. Certainly, intervening in the visual primacy of video games, the magazine was a reinstallation of materially conditioned old-fashioned trade cultures that, to some extent, relied on conventional non-digitalised modes of transportation.

2.2.2 Audiogames.net

Founded in 2002, Audiogames.net constitutes the largest community and database for blind gaming and audio games (over 500 titles)[10]. This platform was capable of transforming the channel-structured distribution of audio games to an active open-access, multichannel community and a user-governed message board. Over 200,000 members

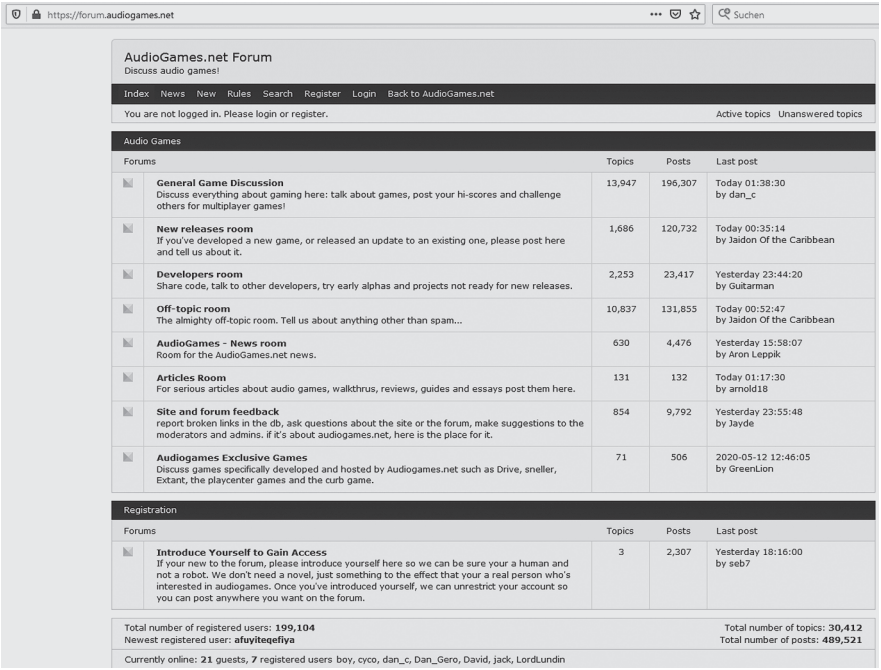
10 Although being the largest network for independent audio games distribution and development, Audiogame.net has not yet been recognised in academic research.

(both sighted and blind) form an auditory community arranging "collective assemblages of enunciation that they become the operators of" (Goddard 2013, p. 45).[11] In addition to this, the users now, as is common practice, upload their audio games 'directly', without requiring a singularly located mediator as their distributional channel. This is also a digital transformation of logistics and a rearrangement of practices of distribution. Instead of distributing the games via material data media rather than postal services, the audio games are made available to a larger audience in, what, is often considered 'real-time'. However, considering digital online media to guarantee direct, lag-free, real-time and decentralised immaterial connectivity is a technological phantasm – especially as it broaches Goddard's argument for "direct communication". Each up- and download process is not only based on material servers, but also always implies a process of arrangement of "star-shaped networks" with "a center surrounded by many radiating lines, with all sorts of tiny conduits leading to and fro" (Latour 2005, p. 177). These networks should not be conceptualised as direct streams from a sender that sends (uploads/downloads) information or data through a channel to a receiver, but rather should be considered as translational processes that gather, rearrange, transform and mediate heterogeneous human and non-human actors and agencies in time and space. However, having said that, the sociotechnical arrangement of Audiogames.net is nonetheless an example of communities that "transform archaic mobilities" (Guattari 2009 [1996], p. 47) in terms of the availability and distribution of audio games and online community-based information exchange. The Audiogames.net forum functions as a(n) (semi)open[12] informational space for usage and sociotechnical make-up of audio games and a communicational space for development. There is a 'developers' room', in which subjects concerning informational technology are discussed which is a forum section for reviewing audio games and one section for articles on audio games. As a(n) (partly) open-source database for amateur and independently developed audio games, the community constitutes an "auto-referential feedback loop between rhizomatic thought and media subversion" (Goddard 2013, p. 46) and a "self-referential feedback loop of political communication between producers and receivers, tending towards breaking down the distinctions between them" (ibid.). According to Genosko, the open-source structure can also be considered a means of liberating and rearranging data property:

> Guattari's characteristically broad strokes were much in evidence when pointing a hopeful way forward. Guattari envisaged that limits on intellectual property would follow as more and more user communities got involved in infotechnology system design. Certainly, free and open-source software hackers have blazed important trails in inverting copyright with General Public Licenses. *(Genosko 2013, p. 19)*

11 Additionally, the Audiogames.net community is active on Twitter and Facebook, thus fostering connectivities with social media that is more mainstream-oriented.

12 Users need to register and login in order to participate in the use of the message board or access download and are supposed to introduce themselves in the forum. Nevertheless, all forum sections can be accessed even without registering, following the open-access philosophy.



1 The Audiogames.net forum with different sections concerning audio games development, distribution and discussion. (Screenshot by MS, © 2020 Audiogames.net)

In many ways, Audiogames.net's agenda is a sociotechnical and communicational progression of the Audyssey. However, the site's community does not intend to replace the magazine. Moreover, all issues of Audyssey, from 1996–2007, are provided by the site via open-access, thus somewhat honoring the pioneering work of Feir and other Audyssey editors as well as broadening the accessibility of the magazine. Establishing a community with the common agenda of developing interactive mechanics for digital auditory gameplay (rather than 'just' for aesthetic pleasures), also serves the purpose of developing auditory gaming conventions that pose a co-existing alternative to the dispositives of visual culture:

> As with actually 'playing digital games', designing games relies on specific cultural conventions or designing conventions that are mutually related to the demands of players, culturally and socio-technically forged ways of playing and the way most player's perception and sensory faculties are configured in relation to these conventions: "The lack of conventions to draw material from is obviously a major obstacle when communication relies on non-speech sound. While Western culture has a rich tradition of visual iconography, there is no well-established auditory counterpart (Gärdenfors 2003, p. 114)." *(Spöhrer 2019, p. 103)*

In this respect, both Audyssey and Audiogames.net are communities that serve as 'birthing pods' for the invention and fortification as well as the collection, practice and communication of new gameplay traditions and mechanics.

The site is mainly "moderated by the community" (Audiogames.net 2020), which enables a creative democratic space for promoting audio games and support as well as informing the audio game community, which ultimately provides a platform for intervening in the visual primacy. However, the site's founders, Richard van Tol and Sander Huiberts, who have both been active in audio game theory[13], development and distribution since 1999, do not seek to explicitly replace, attack or destroy visual culture, as the front page of the site shows:

> Audiogames, as opposed to video games are computer games whose main output is sound rather than graphics. Using sound, games can have dimensions of atmosphere, and possibilities for gameplay that don't exist with visuals alone, as well as providing games far more accessible to people with all levels of sight […]. If you've not played an audiogame before, strap on some headphones, try one for yourself and hear the difference! *(van Tol and Huiberts, 2020)*

Instead of targeting exclusively blind players with this welcome text, the community explicitly addresses new readers and players with "all levels of sight", and the prompt to "hear the difference" can be interpreted as an invitation to sighted players to try out audio-only games and broaden the awareness for the possibilities of game audio. Amateur communities like Audiogame.net with the agenda of promoting sound technologies and aesthetics for "auditory interactive cues" and "auditory environments" (cf. Spöhrer 2019) can be considered a bottom-up practice of creating an economical milieu for an audio games market that is not (yet) regulated and dictated by big commercial game development studios, but a self-governed professionalisation of a "subcultural scene" of "hobby programmers" (cf. cf. Hermann 2010).

In this respect, Audiogames.net demonstrates "contrasting political strategies that can, in a post-media context, exist side by side" (Slater 2013, p. 38) as well as that contrasting economic interests can coincide. Therefore, the agenda of this 'sensory-economic niche' (certainly also a media-economic niche), is to both broaden the target group of audio game users, to normalise hearing as a mode of playing, to recruit sighted users and thus render the audio game genre economically relevant:

> By providing a clear view on the audio game genre we also wish to contribute to the evergrowing game industry, that is only just now beginning to recognize some of the potentials of audio gaming. AudioGames.net is now mostly run by members of the international blind gamers community. *(van Tol/Huiberts 2020)*

13 Van Tol and Huiberts (2008), for example, developed the IEZA, a framework for game audio that can be considered a theory and guideline for audio interactivity and storytelling.

It is important to mention, that the games are largely programmed on the premise of individual subjective sensory regimes and aesthetic conventions and are distributed autonomously. I have discussed the problems with the fact that Kaze no Regret was not the (revolutionary) economic success desired by its creator Kenji Eno. However, I would argue that one of the factors the game could not establish an alternative aesthetic and economic niche was that Eno distributed the game through the (capitalist) channels of development and distribution of a large digital game company, namely Sega. Kaze no Regret can probably be considered a (small-scale) "singularizing rupture" in the Guattarian sense, as it addressed alternatives to techno-sensory subjectification and production, enunciating "non-equivalence within a field of total [sensory] equivalence" (Genosko 2013, p. 10; additions MS). However, instead of creating and distributing the game autonomously, design, production and distribution was decentered and regulated by Sega, as it still is a common practice in mainstream game production logistics today. Kenji Eno, who envisioned the game to be a mediatising 'contact space' that allowed blind and sighted players to gather and communicate, prematurely traded his rights to the game with Sega, who have never re-released it ever since following its moderate economic performance:

> So excited was Eno about the project that he used his clout as a first-class game designer to bargain with Sega such that in exchange for the exclusive rights to the game, Sega would donate a thousand Sega Saturns to blind people. Eno, in turn subsequently donated a thousand copies of Real Sound along with the game consoles. In explaining why the game has only been re-released once despite apparent interest in the title, Eno has stated that: "It's been several years now, and of course the contract probably isn't valid anymore, but the reason that I haven't done anything with this game is that I made this promise with Sega back in the day, and it's exclusive because of those conditions." *(Wikipedia 2020)*

The game certainly was an (experimental) product that did not conform to "dominant economic-semiotic systems, considered in terms of the market" (Genosko 2013, p. 17). However, in contrast to Audyssey's and Audiogame.net's autonomous and democratic production and distribution, Kaze no Regret was bound to fail to reach a larger audience by being regulated, limited and ultimately dismissed by the capitalistic structures of the professional gaming market.

3 Conclusion

Regarding the Audyssey magazine and Audiogame.net one might reconsider Guattari's questions raised in Soft Subversions:

> Is it possible to envision a proliferation of "minority becomings" capable of diversifying the factors of subjective autonomy and economic self-management within the social field? Are they, in any case, compatible with modern systems of

> production and circulation that seem to call for ever more integration and concentration in their decision-making procedures? *(Guattari 2009 [1996], p. 301)*

In an interview given in 2010, Richard von Tol estimated that approximately 50 commercial audio game titles were available (mostly) as downloadable, inexpensive apps for smart devices (cf. Hermann 2010). Given the relative success of IOS and Android audio games such as A Blind Legend (Dowino 2016) and the commercial outlets, (this game is available from Apple App-Store, Steam, Google Play Store) this number has risen. This is certainly also related to the accessibility, availability, relevance and broad advertisement of such commercial outlets and also an effect of the increasingly discussed issue of 'accessible' and 'inclusive' technologies in political and popular discourses. However, titles such as A Blind Legend are still independently produced by minor studios and, as in the case of Dowino's game, are often financed by crowdfunding or government funding. In turn, this also indicates that audio games are not yet produced by major commercial studios and that the visual primacy is still the dominant regulating force in the gaming economy. With an estimated 25 million blind people worldwide, there is a target audience and a market gap for this, and it seems that both independent studios and amateur developers do tap into this market.[14] There is growing demand for alternative sensory gaming and accessible games and more and studios employ game designers that are commissioned to develop games according to accessibility standards (cf. Ahmia 2005; Hermann 2010). Certainly, such developments are (at least partly) the results of blind online gaming communities that started out as information and trade portals. They are forms of minority production of blind gamer subjectivities that generated a discourse on this (formerly) subcultural phenomenon, "leading to soft subversions and imperceptible revolutions that will eventually change the face of the world, making it happier" (Goddard 2013, p. 45). Blind gamer Steve Saylor formulates his vision of the enunciating power of blind communities and the eventual recognition of the (sighted) mainstream as follows:

> Growing up when people were making consoles and games no one was thinking about disability because it wasn't at the forefront. I'm not knocking any developers for that. They probably didn't know anyone or have a disability themselves. But when we see the growing community of disabled people online who want to be able to play the same games their friends are playing, it can have an influence. The louder our voices become the more people start paying attention. *(Isador 2020)*

Whether a growing popularity of audio games will steadily lead to commercial appropriation and exploitation of such or whether independent audio game developers are capable of offering an economically relevant alternative to the digital game market has yet to be proven.

14 Here I estimated 10 % of people who live in industrial countries with potential accessibility to computer hard- and software. Almost 90 % of blind and visually impaired people worldwide live in the poorest countries of the world, and their disability is a direct result of their socio-economic situation (cf. Blindenmission Deutschland, 2020).

Bibliography

Adilkno: Theory of the Sovereign Media. In: Clemes Apprich et al. (Eds.): *Provocative Alloys. A Post-Media Anthology*. London 2013, pp. 62–67.

Tarik Ahmina: Daddeln mit den Ohren: Leipziger Schau präsentiert Computerspiele für Blinde. In: Deutschlandfunk. Online: https://www.deutschlandfunk.de/daddeln-mit-den-ohren.684.de.html?dram:article_id=41482 (Last accessed: 15.5.2020)

Henry C. Alphin Jr. / Jennie Lavine / Roy Y. Chan (Eds.): *Disability and Equity in Higher Education Accessibility*. Hershey 2017.

Clemens Apprich: Remaking Media Practices: From Tactical Media to Post-Media. In: Clemens Apprich et al. (Eds.): *Provocative Alloys: A Post-Media Anthology*. London 2013, pp. 122–140.

Atarimuseum: Touch Me Arcade Flyer. Online: http://www.atarimuseum.com/videogames/arcade/fullsize/touchme.html (Last Accessed 15.5.2020)

Stephanie Boluk / Patrick Lemieux: *Metagaming: Playing, Competing, Spectating, Cheating, Trading, Making, and Breaking Videogames*. Minneapolis 2017.

Daniel Bolz: *Kunst, Code und Maschine: Die Ästhetik der Computer Demo-Szene*. Bielefeld 2011.

Andreas Broeckmann: Postmedia Discourses. Online available: http://www.mikro.in-berlin.de/wiki/tiki-index.php?page=Postmedia+Discourses (Last accessed: 15.5.2020).

Michel Callon: Some elements of a sociology of translation: Domestication of the scallops and the fishermen of St. Brieuc Bay. In: John Law (Ed.): *Power, action and belief. A new sociology of knowledge?* London 1986, pp. 196–233.

Michel De Certeau: *Die Kunst des Handelns [Practices of Everyday Life]*. Berlin 1988.

Katie Ellis / Mike Kent: *Disability and New Media*. New York 2011.

Michael Feir: Computer Games Accessible to the Blind. In: *Audissey* 1. Online: https://www.audiogames.net/page/_Audyssey_Magazine_issue_1_-_July_-_August_1996_ (Last accessed: 15.05.2020).

Michael Feir: Real Sound: Kaze no Riglet. Audiogames.net. Online: https://www.audiogames.net/db.php?action=view&id=realsoundkazenoregret (Last accessed: 15.05.2020)

Sebastian Felzmann: Playing Yesterday. Mediennostalgie und Videospiele. In: Andreas Böhn / Kurt Möser (Eds.): *Techniknostalgie und Retrotechnologie*. Karlsruhe 2010, pp. 197–215.

Mark Finn: Console Games in the Age of Convergence. In: Frans Mäyrä (Ed.): *Computer Games and Digital Cultures*. Tampere 2002, pp. 45–58.

Ludwik Fleck: *Denkstile und Tatsachen*. Berlin 2011.

Melanie Fritsch: History of Video Game Music. In: Peter Moormann (Ed.): *Muisc and Game. Perspectives on a Popular Alliance*. Wiesbaden 2013, pp. 11–40.

Gary Genosko: *The Guattari Reader.* Oxford 1996.

Gary Genosko: The Promise of Post-Media. In: Clemens Apprich et al. (Eds.): P*rovocative Alloys: A Post-Media Anthology*. London 2013, pp. 15–25.

Michael Goddard (2013): Félix and Alice in Wonderland: The Encounter Between Guattari and Berardi and the Post-Media Era. In: Clemens Apprich et al. (Eds.): *Provocative Alloys: A Post-Media Anthology*. London 2013, pp. 44–61.

Gian Maria Greco : Accessibility Studies: Misuses, Abuses, and the Method of Poietic Design. In: Constantine Stephanidis (Ed.): *HCI International 2019*. Switzerland 2019, pp. 16–27.

Félix Guattari : *Soft Subversions. Texts and Interviews 1977–1985*. Los Angeles 2009.

Félix Guattari: Towards a Post-Media Era. In: Clemens Apprich et al. (Eds.): *Provocative Alloys: A Post-Media Anthology*. London 2013, pp. 26–27.

Sebastian Hermann: Spielen ohne zu sehen. In: *Süddeutsche Zeitung*. Online: https://www.sueddeutsche.de/digital/audiogames-spielen-ohne-zu-sehen-1.910667 (Last accessed: 15.05.2020).

Graham Isador: This Blind Gamer Is Fighting for Accessibility in Video Games. *Vice.com*. Online available: https://www.vice.com/en_ca/article/akzgwb/blind-gamer-steve-saylor-is-fighting-for-accessibility-in-video-games (Last accessed: 10.5.2020).

Paul T. Jaeger / Cynthia Ann Bowman (Eds.): *Understanding Disability: Inclusion, Access, Diversity and Civil Rights*. Westport 2005

Cadence Kinsey: From Post-Media to Post-Medium: Rethinking Ontology in Art and Technology. In: Clemens Apprich et al. (Eds.): *Provocative Alloys: A Post-Media Anthology*. London 2013, pp. 68–83.

Alexis Kirke: When Soundtrack is the Game. From Audio Games to Gaming the Music. In: Duncan Williams / Newton Lee (Eds.): *Emotion in Video Game Soundtracking*. Cham 2018, pp. 65–84.

Laura Lambert: *The Internet: A Historical Encyclopedia: Biographies*. Oxford et al. 2005.

Bruno Latour: *Reassembling the Social. An Introduction to Actor-Network Theory*. Oxford 2005.

Lev Manovich: Post-Media Aesthetics. In: *Manovich.net*. Online available at: http://manovich.net/content/04-projects/032-post-media-aesthetics/29_article_2001.pdf (Last accessed: 10.05.2020).

Patrick M. Markey: Video Games and Mental Health. In: Howard S. Friedmann (Ed.): *Encyclopedia of Mental Health*. London 2016, pp. 356–361.

Annamaria Motrescu-Mayes / Susan Aasman: *Amateur Media and Participatory Cultures: Film, Video, and Digital Media*. London 2019.

David Parisi: Game Interfaces as Bodily Techniques. In: IMA (Hrsg.): *Gaming and Simulations: Concepts, Methodologies, Tools and Applications*. Hershey 2011, pp. 1033–1047.

Domenico Quaranta: The Postmedia Perspective. In: *Rhizome*. Online available at: http://rhizome.org/editorial/2011/jan/12/the-postmedia-perspective/ (Last accessed: 10.05.2020).

Rebeccah Redden: VR: An Altered Reality for Disabled Players. First Person Scholar. Online available: http://www.firstpersonscholar.com/vr-altered-reality/ (Last Accessed 25.5.2020).

Bernard Robben*: Der Computer als Medium*. *Eine transdisziplinäre Theorie*. Bielefeld 2006.

Niklas Röber / Cornelius Huber / Knut Hartmann / Matthias Feustel / Maic Masuch: Interactive Audiobooks: Combining Narratives with Game Elements. In: Stefan Göbel / Rainer Malkewitz / Udo Iurgel (Eds.): *Technologies for Interactive Digital Storytelling and Entertainment*. Berlin/Heidelberg 2006, pp. 358–369.

Michael Schillmeier: Dis/Abling Practices: Rethinkin Disability. In: *Human Affairs* 17, pp. 195–208.

Alexis Sepchat / Simon Descarpentries / Nicolas Monmarché / Mohamed Slimane: MP3 Players and Audio Games: An Alternative to Portable Video Games Console for Visually Impaired Players. In: Klaus Miesenberger / Arthur Karshmer / Peter Penaz / Wolfgang Zargler (Eds.): *Computers Helping People with Special Needs*. Berlin/Heidelberg 2008, pp. 553–560.

Howard Slater: Post-Media Operators Sovereign and Vague. In: Clemens Apprich et al. (Eds.): Provocative Alloys: A Post-Media Anthology. London 2013, pp. 28–43.

Gayarti Chakravorty Spivak: Can the Subaltern Speak? In: Carry Nelson / Larry Grossberg (Eds.): *Marxism and the interpretation of culture*. Urbana 1988, pp. 66–111

Markus Spöhrer: The (Re)Socialization of Technical Objects in Patient Networks: The Case of the Cochlear Implant. In: *International Journal of Actor-Network Theory and Technological Innovation* 5(3), pp. 25–36.

Markus Spöhrer: Playing with Auditory Environments in Audio Games: Snake 3D. In: Markus Spöhrer (Ed.): *Analytical Frameworks, Applications, and Impacts of ICT and Actor-Network-Theory*. Hershey 2019, pp. 87–111.

Constantine Stephanidis: *The Universal Access Handbook*. Boca Raton 2009.

Richard van Tol / Sander Huiberts (2008). IEZA: A Framework for Game Audio. Online availale: https://www.gamasutra.com/view/news/108031/Feature_IEZA__A_Framework_For_Game_Audio.php (Last Access: 15.5. 2020).

Wikipedia: Real Sound: Kaze no Regret. Online available: https://en.wikipedia.org/wiki/Real_Sound:_Kaze_no_Regret (Last Accessed: 20.5.2020).

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Post-Mass-Media

The Dilemma between Emancipatory Re-Appropriation and the New Technological Condition

> At the end of the day the user is tired. Laying down in bed, the pale-blue shadow of the smartphone no longer illuminates the face but rather keeps the sleepiness at a further distance. Still, the feeling of being connected to the wide world releases heaps of satisfying serotonin. (Park 2020, pp. 47–54) The fatigue is challenged by the user's longing. "Am I the subject here?", she/he suddenly asks, no longer tired. The smartphone doesn't react, Siri and Alexa have found the way into their realm of sleep. No answer from anywhere. The user broods. The user's thumb exhales. But the thumb was wrong. The user straight away pushes it to start the camera-app. The user is making a selfie-video, saying out loud to the screen: "I am broadcasting now, live from home. I am producing my own media. Goodbye established mainstream media. I am going to rock it on my own."

"Today's condition" (Guattari 2000, p. 42) has changed. Trying to talk about Felix Guattari's term of "post-mass-media" presupposes a narrative about the current "today's condition". When Guattari came up with his term at the end of the 1980s, there were no such things as smartphones, smart homes or other devices attributed to being smart. Yet, there was still hope that further technological inventions would engender emancipatory media practices. Guattari, though familiar with the French internet-predecessor *Minitel*, couldn't foresee the development of the world wide web or the "Americanization of global internet governance" (Genosko 2013, pp. 14–25) and all its consequences. The technological and political developments following the dissolution of the Soviet Union are history. Nevertheless, it is fundamental to be aware of the "today's condition" Guattari faced in 1989.

When he designed his concept of post-mass-media, Guattari's thoughts did not spring from nowhere. There are clues that can tell us more about an ideal that Guattari was inventing and defending in "Three ecologies": *emancipatory media theory*. (Garnham 2000) Ensuing from Bertolt Brechts "Theory of Radio" (Mueller 1989) (around 1930), Hans Magnus Enzensberger's "Constituents of a theory of the media" (Enzensberger 1970) is one central text. Enzensberger, like Guattari, considered alternative practices and concepts of media usage. Concentrating on the relationship between user

and producer, Enzensberger followed a Marxist approach in trying to conceptualise how users could act in an emancipatory way. Influenced by Adorno and Horkheimer, Enzensberger observed mass media on the one hand as a manipulative instrument of power, as a "consciousness shaping industry" (Enzensberger 1970, p. 14), that incapacitates users. In this negative interpretation users are forced into passivity; depoliticised in their position – they can only re-act in a society where reciprocal communication is prevented by mass media (Enzensberger 1970, p. 26). On the other hand, there was the utopian idea of emancipatory media practices in which user and producer amalgamate. This would imply a questioning point of view towards the one-sidedness of repressive mass media where users would appropriate the modes of production. Enzensberger's approach pointed out a historical opportunity that in his "today's situation" of the 1970s could have remodeled "mass participation in a social and socialized productive process" (Enzensberger 1970, p. 15) possible.

This could have been the end of a narrative that might have persistently survived in European discourses of the 20th century: one of the capitalist modes of production that always ends up in a juxtaposition between user and producer, productive forces and means of production, the ruling class and the ruled. The idea of emancipatory media practices that Enzensberger developed would have transformed everyone into a user-producer, a manipulator of the mass media in their own right. With one of the most influential papers of information theory – Claude E. Shannon's "The Mathematical Theory of Communication" (1948) – in mind, the emancipatory approach was clearly an attempt to overcome the dichotomy of transmitter and receiver. Enzensberger's idea was to change modes of production and reception into self-organised practices as a new type of re-singularised mass media. If everyone had become a potential producer and consumer at the same time, the one-sidedness of mass media as monodirectional entity would have been replaced.

However, thirty years after the publication of "Constituents of a theory of the media" Enzensberger himself admittedly revised his former ideas in an essay published in the German magazine Der SPIEGEL (Enzenserger 2000, pp. 92–101). He discharged his approach as "naïve" (Enzensberger 2000, p. 95) and, instead of offering an (utopian) emancipatory media practice, called for more sobriety and rationality in the discourse. The "prophecy of the emancipatory power of the new media" (Enzensberger 2000, p. 96) was deceptive, as he claimed thirty years after the publication of his canonical paper.

Taking this detour via Enzensberger leads us back to Guattari and his term of post-mass-media. There are some similarities between the approaches of Enzensberger and Guattari, and there are fundamental differences. Using Enzensberger's paper from 1970 as a blueprint, we will try to carve out why Guattari's term is still attractive to media theory, whilst Enzensberger has been put into the dusty canon of media theory, perceived as naïve by its very own author. The common ground between the views of Enzensberger and Guattari is the belief that within (post) mass media there is a possibility to change the conditions: Both approaches focus on the potentialities that can be found in subjects themselves; both think about a *new*, more or less utopian, way of

media usage; both reconsider the (re-)appropriation of mass media by subject-groups; and neither succumb to the romantic idea of returning to a society before Gutenberg and the emergence of mass media. The fundamental difference between Guattari and Enzensberger might be the description of mass media. While Enzensberger uses the term *mass media*[1] Guattari decided to speak of *post-mass-media* twenty years later. Keeping in mind that both approaches developed an attempt to change the conditions *within* their respective "today's situation", Guattari's term is understandable as an internal differentiation. This being-in-between is both one potentiality of the term and a distinguished reason why Guattari is still *en vogue*. Mass media is not dead in times of alleged individualised users. On the contrary, the so-called classic mass media like newspapers, news agencies and television is still alive and being consumed even though their consumers are getting fewer and older.[2]

The transition to Guattari's term *post-mass-media* could therefore be understood as an internal differentiation in an era shaped by mass media. While mass media still exists, Guattari poses the new term to "encourage capitalist societies to make the transition from the mass-media era to a post-media age, in which the media will be reappropriated by a multitude of subject-groups capable of directing its resingularization." (Guattari 2000, p. 61) This approach leads to the second fundamental difference between Guattari and Enzensberger – the way of thinking about subjects and subjectification: Enzensberger disclaims the question of subjectification processes. His shaping of acting subjects in the 1970s was largely drawn from Marx and focuses on class systems and productive forces. However, he believed in the potentiality of every individual to resist the one-sidedness of mass media and find an emancipatory way to form a group of self-organised user-producers. Guattari goes one step further: his critique of capitalism culminates in his often used abbreviation IWC – Integrated World Capitalism. (Guattari 2000, p. 47) Conceptualizing IWC as an ubiquitous influential power[3], an "increasing deterioration of human relations with the socius, the psyche and 'nature'" (Guattari 2000, p. 41), that changes the manner in which subjects think and subjectify. We can identify IWC as the basic layer of the "today's situation" Guattari once wrote. One negative aspect that he points out is the "increasing deterioration of human relations with the socius, the psyche and 'nature'" (Guattari 2000, p. 41). IWC therefore has a tendency to become immaterial: it is no longer a capitalism that produces goods and services but one that produces "signs, syntax and – in particular, through the control which it exercises over the media, advertising, opinion polls, etc. – subjectivity." (Guattari 2000, p. 47) As Guattari points out: "A capitalistic subjectivity is engendered

1 Probably, Enzensberger preferred using this term because he was highly influenced by the Frankfurt School. They used *mass media* as a part of their critique of the cultural industry.

2 see Studie Massenkommunikation, carried out and published every five years by German public broadcasting company ARD-Werbung Sales & Services.

3 There is an intersection to current descriptions of the "today's situation" in the 2020s: The ubiquity of media and non-human actors is used as fundamental narrative of a new situation, e.g. by Parisi 2009, Hansen 2011, Hörl 2016, Introna 2017.

through operators of all types and sizes, and is manufactured to protect existence from any intrusion of events that might disturb or disrupt public opinion. It demands that all singularity must be either evaded or crushed in specialist apparatuses and frames of reference." (Guattari 2000, p. 50) In other words of Guattari: "capitalist power has become delocalized and deterritorialized, both in extension, by extending its influence over the whole social, economic and cultural life of the planet, and in 'intension', by infiltrating the most unconscious subjective strata." (Guattari 2000, p. 49) It is not a singular subject Guattari is talking of. He distinguishes between the individual subject and modes of subjectification that can operate independently of the subject. He avoids speaking of the subject as a closed entity. Rather, he speaks of "components of subjectification" and "vectors of subjectification" (Guattari 2000, p. 36) which lead to a percipience of the subject in categories of relations.

In a reductive summary, Guattari's analysis of his "today's situation" does not give any reason for an optimistic utopian thinking. Rather, it presents a very pessimistic view of a world where even the most intimate moments and relations are highly influenced by IWC – "human relations with the socius, the psyche and 'nature'". So how can we get out of this disaster? Is there any possibility for an emancipatory way out in which the subject is still whole and powerful again? There is not. Because, as already shown, the subject cannot be thought of as a closed entity. At least since Guattari, subjects are thought of in relations, in modes of subjectification. Instead, the goal in the present situation of media ubiquity – the new technological condition (Hörl 2011) – is a renegotiation of the way that mass media "relates to the mental, social and environmental ecologies, and make alternative forms of subjectivation possible" (Daugaard 2018, p. 298). This *new way* can be understood as a situated practice of appropriation or land grabbing within the borders of today's conditions. Guattari's *post-mass-media* is therefore thought of not as a revolutionary battle cry but as a term that enables practices of multiple small interventions within the bigger picture. (Apprich 2015, p. 162) Expounding the potentialities of transferring *post-mass-media* into today's technological condition, the example of Christoph Wachter and Mathias Jud joins the game. Before getting into the work, we will try to concretise what we are talking about when we attempt to make *post-mass-media* operational in the new technological condition of the 2020s.

The technology has not disappeared within the technological condition we are talking about. (Weiser 1991, pp. 94–105) Rather, it is getting thinner, smoother (Han 2018) and opaquer. The devices are more affordable and can potentially be used for non-capitalist goals – as Guattari hoped for (Guattari 2000, p. 62). Of course, we must keep in mind the disastrous consequences of smartphone-production for the people and the environment that are exploited. At the same time, the degree of abstraction (Enzensberger 2000, p. 94) of the present technologies is getting higher and becoming less accessible in their modes of function for most users. Briefly said, the human being is confronted not only with devices she/he does not understand but also with a fundamental questioning of her/his position in the world. The rise of thinking in

global, ecological and non-human agency categories questions the "anthropocene illusion" that saved the "fantastic monopoly of power and influence" (Hörl 2016, p. 44) for the human being over centuries. Actually, media theorists could write an optimistic description of the current "today's situation". Modes of production are no longer centralised, nearly everyone owns a smartphone (in 2018, 89,5 percent of the population in South Korea over the age of three used smartphones (Park 2020, p. 47)) and is therefore a possible producer. Almost everyone can potentially create content, upload self-made videos and communicate their opinion on Social Network Sites (SNS).

But, and this objection has to be emphasised, even if the modes of production are supposedly in the hands of the masses, there are still several reasons to be alerted, and this is not only due to the Americanisation of global internet governance mentioned at the beginning. Even if we accept the argument that people are no longer only consumers of mass media but producers as well, the capitalist relations of production are centralised and monopolised by fewer global companies than ever. Therefore, a persistent narrative is continuous in media science, where most of the technologies we depend on today (GPS, RFID, world wide web) have their roots in the military-industrial-complex and use protocol-control-logics. (Galloway 2004) In everyday life, new forms of dependency and subjection (Park 2020) have emerged as the smartphone has become "the hub of our life" (Furini et al. 2020). Leaving this short outline behind, we can sum up two important facts that might not sound worth mentioning because they are common fact, but they are fundamental for understanding the dilemma we are trying to face using Guattari's term: Firstly, people use digital technologies in their everyday lives, worldwide. Especially since Apple launched the first iPhone in 2007, the smartphone as a device made a relentless rise throughout the world. Secondly, if we look at the theorists in humanities, our categories of power and its abuse, relations between human and non-human actors, humans and environment, and politics (international monopolies being counteracted by rising nationalisms) are at stake. At the same time technologies make things possible and make life easier. As Guattari and Enzensberger mentioned, it would be absurd trying to forget these advantages and *fait social* in order to live in a pre-technological world (which is impossible, as humans have always been technological beings).

In the light of this general and short description of the current "today's situation", the work of Wachter and Jud shows a new embodiment of post mass media. The pair initiated their art project "qaul.net" in 2011. The central aspect of this work is a software program which runs on every WiFi-enabled device such as computers or smartphones. People can download the software once and pass it on without being dependent on continual internet access. Instead, the software can be spread from device to device and establish a mesh-network, creating a "provider-independent, self-configuring communication network"[4]. Why, though, should it be necessary to use such a mesh-network software? From a European perspective it seems hard to imagine, because the

4 https://www.qaul.net/ (05.04.2020).

impression of a free world wide web is powerful here. As long as it works and everyone has access to it, everything seems fine for most of the people. Briefly put, the questions concerning power, control and surveillance are mostly raised by data security activists, cultural pessimists and media theorists. Taking a more global perspective, internet shutdowns come to the agenda. Organizations like Access Now[5] are publishing reports about quality and quantity of global internet shutdowns.[6] Access Now defines internet shutdowns as "an intentional disruption of internet or electronic communications, rendering them inaccessible or effectively unusable, for a specific population or within a location, often to exert control over the flow of information." Access Now documented 213 shutdowns in 2019 in 33 countries worldwide (25 countries in 2018). Shutdowns happened for example in India (total blackout in Jammu and Kashmir), Chad (cut access to SNS like twitter, Facebook, Instagram and Youtube for 472 days between 2018 and 2019[7]) or Myanmar (shutdowns in nine townships, amongst others in Rakhine state where up to 600.000 Rohingya Muslims reside).

These attacks on the freedom of internet access provide one reason why Wachter and Jud's project could be read as an example of a post-mass-media function. (Lemos 2010, pp. 403–420) As Andre Lemos stresses, it makes more sense to think in terms of functions, not in terms of devices when it comes to post-mass-media. The post-mass-media function of "qaul.net" is versatile. In the first place, the software makes something visible that could be marked as an emancipatory insight. The devices we are using in our everyday lives are not only for playing, shopping, banking or communicating. They can be used as a tool to connect with others without being dependent on governmental or private company institutions. Therefore, "qaul.net" reveals a potentiality that is covered (or ignored) in everyday use (as the companies construct the user and her/his habits). In the second place, "qaul.net" shows how subject-groups can re-appropriate areas and territories[8] that have been capitalised upon by multinational companies. Therefore, "qaul.net" is not trying to change the big picture in one revolutionary step but infiltrates[9] the existing structures and makes alternative practices visible. It can be called emancipatory because it allows subject-groups to call the shots. They can create their own mesh-network without fearing possible censorship or shutdowns by governments or companies. Also, users of "qaul.net" can become producers on their own, sending files, information or videos to others in the network. To Enzensberger in the 1970s, that would mean dissolving "the contradiction between producers and consumers" that is constantly "reinforced by economic and administrative measures." (Enzensberger 1970, p. 21) Thirdly, it changes modes of subjectification. Since "qaul.net"

5 https://www.accessnow.org/ (07.04.2020).

6 There are also other NGO which do the same: https://internetshutdowns.in/ (07.04.2020).

7 see. #KeepItOn 2019 https://www.accessnow.org/cms/assets/uploads/2020/02/KeepItOn-2019-report-1.pdf (07.04.2020).

8 For further discussion of the situatedness and practices of (de-)territorializing see. e.g. Lemos 2010, p. 410, 417.

9 Infiltration as term of movement here has to be seen other than an outside infiltrating an inside.

is free software and open source, it cannot be monetised. It therefore stands in opposition to an IWC that tries to monetise even the most minor relations between human beings and others (no matter if these others are human or non-human or other relations). Using "qaul.net" for communication, data transfer and organisation means that the subjects become their own networks. (Apprich 2015, p. 165) They can no longer be addressed by predictive algorithmics. They are no longer a subject with a certain profile and a certain address (surely, every subject has multiple addresses, but every address is a potential entry for control and power mechanisms). At the same time, the networks are mobilised since they are no longer dependent on physical digital infrastructures such as radio masts and towers. They can be established in movement, in different areas of cities wherever people come together holding their devices ready. The re-appropriation of networks through "qaul.net" could simultaneously be a re-appropriation of public places. While cities are already "general environments of connection (mobile wireless Internet, cell phones, Bluetooth, radio-frequency labels, radio-frequency identification)" (Lemos 2010, p. 405), these spheres tend to be commercialised. Yet, if subject-groups disturb these general environments by creating their own networks, the public sphere could become common ground, finally. (Hardt/Negri 2009, p. 280) As Michael Hardt and Antonio Negri mentioned in "Commonwealth", the dichotomy between public (controlled by the state) and private (owned by capitalists) should be replaced in favor for the common. Conceptualised as "fundamentally autonomous from both" (Hardt/Negri 2009) the public and the private, the common could be thought of as a central term for a post-mass-media function. Provided as creative commons "qaul.net" shows how one project can make Guattari's term of post-mass-media productive again: The re-singularised subject-groups and users are no longer caught between the dichotomy of public and private, production and consumption. They begin to create new forms of communicating that can be described as post-mass-media.

> At the beginning of the day the user is wide-awake. Walking through the city, lifting her/his gaze to the sky, the user thinks "somewhere there must be something that makes everything possible". Waking from this dream the user laughs as the thought "I am the network" replaces the elevator music of the commercial sphere. The need to find alleged public WiFi dissolves. Only a need to find other people, the socius, the significant others remains. Significant, because they are not only what life is – vitality – but they are networks as well. No singular person, no particular network is more important than another; all collaborate in multiple directions, in multiple spaces and multiple places. We are standing on common ground. And we have something in common: the ability to behave differently in the future.

Bibliography

Clemens Apprich: *Vernetzt – Zur Entstehung der Netzwerkgesellschaft*. Bielefeld 2015, p. 162.

Solveig Daugaard: *Collaborating with Gertrude Stein. Media ecologies, reception, poetics.* Linköping 2018.

Hans-Magnus Enzensberger: Constituents of a theory of the media. In: *New Left Review* No. 64, London 1970, pp. 13–36.

Hans-Magnus Enzensberger: Das digitale Evangelium. In: *Der Spiegel* No. 2, 2000. pp. 92–101.

Marco Furini / Silvia Mirri / Manuela Montangero / Catia Prandi: *Privacy Perception when Using Smartphone Applications*. Mobile Networks and Applications, 2020.

Alexander Galloway: *Protocol. How control exists after decentralization*. Cambridge/London 2004.

Nicholas Garnham: *Emancipation, the Media, and Modernity. Arguments about the Media and Social Theory*. Oxford 2000.

Gary Genosko: The promise of post-media. In: Clemens Apprich et. al. (Eds.): *Provocative alloys. A post-media anthology.* London/Lüneburg 2013, pp. 14–25.

Felix Guattari: *The three ecologies*. London / New Brunswick 2000 [1989].

Byung-Chul Han: *Saving Beauty*. Cambridge/Malden 2018.

Mark B. N. Hansen: Medien des 21. Jahrhunderts, technisches Empfinden und unsere originäre Umweltbedingung. In: Erich Hörl (Ed.): *Die technologische Bedingung. Beiträge zur Beschreibung der technischen Welt.* Berlin 2011, pp. 365–409.

Michael Hardt / Antonio Negri: *Antonio* (2009): *Commonwealth.* Cambridge 2009.

Erich Hörl (Ed.): *Die technologische Bedingung. Beiträge zur Beschreibung der technischen Welt.* Berlin 2011.

Erich Hörl: Die Ökologisierung des Denkens. In: *Zeitschrift für Medienwissenschaften* 2016, 7 (14), pp. 33–45.

Jeong Hye Park: Smartphone Use Patterns of Smartphone-dependent Children. In: *Child Health Nursing Research*, No. 1, Vol. 26, Daegu 2020, pp. 47–54.

Lucas D. Introna: Die algorithmische Choreographie des beeindruckbaren Subjekts. In: Robert Seyfert / Jonathan Roberge (Hrsg.): *Algorithmuskulturen. Über die rechnerische Konstruktion der Wirklichkeit*. Bielefeld 2017, pp. 41–74.

Andre Lemos: Post–Mass Media Functions, Locative Media, and Informational Territories: New Ways of Thinking About Territory, Place, and Mobility in Contemporary Society. In: *Space and Culture*, 2010, Vol. 13, Nr.4, Newbury Park 2010, pp. 403–420.

Jinyoung Min / Byoungsoo Kim: How are People Enticed to Disclose Personal Information Despite Privacy Concerns in Social Network Sites? The Calculus Between Benefit and Cost. In: *Journal of the Association for Information Science and Technology*, Vol. 66, Nr.4, 2014, p. 13.

Roswitha Mueller: *Bertolt Brecht and the theory of media.* Lincoln 1989.

Studie Massenkommunikation, carried out and published every five years by German public broadcasting company ARD-Werbung Sales & Services.

Luciana Parisi: Technoecologies of Sensation. In: Bernd Herzogenrath (Ed.): *Deleuze|Guattari & Ecology*. Basingstoke 2009, pp. 182–199.

Mark Weiser: The Computer for the 21st Century. In: *Scientific American* 1991, Vol. 265, No. 3, pp. 94–105.

Websites

https://internetshutdowns.in/ (07.04.2020).

https://www.accessnow.org/ (07.04.2020).

https://www.accessnow.org/cms/assets/uploads/2020/02/KeepItOn-2019-report-1.pdf (07.04.2020).

https://www.qaul.net/ (05.04.2020).

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Post-Mass-Media as networked|networking Performativity

Revisiting Guattari's Concept of Thinking through Current Documentary and Artistic Practices

Guattari revisited – networked|networking and the three ecologies of post-mass-media

Whether in combination with Lyotard's "*condition postmoderne*" (1979) or Krauss' reflection on "art in the post-media condition" (2000), whether in Manovich's proclamation of "post-media aesthetics" (2001) or Slater et al.'s turn on media theory proper in terms of the contradictory simultaneity of "web 2.0 monocultures and cultural complexification" and the potential of "social and media assemblages [to] unleash new forms of collective expression and experience" (Slater/Iles 2013, p. 7), the notion of post-mass-media seems to be more relevant than ever. Though Guattari's train of thought on social ecology, mental ecology and environmental ecology specifically addresses the condition of political and socio-cultural transitions of the late 1980s/90s, his reflections can instigate productive discussions of present-day media theory – in the case of this contribution to documentary theory – especially as our current *'condition humaine'* is set in times of constant transformation. And without regard to the fact that the web 2.0 as we experience it was a dream of the future at the time Guattari coined the term 'post- mass-media', Guattari's belief in new media's potential to form an alternative to the passivity, cynicism, resignation and lack of accountability of 'mass media' remains as topical as ever.

One aspect hereby is certainly the interdependence of the three ecologies – not the least in terms of the current socio-ecological as well as socio-economic and humanitarian crises we are facing in streams of refugees, migration and the loss of biodiversity or climate change; and, in combination with the ambition to cope with the current challenges, the same certainly goes for the promise of digital media and network society to circumvent mass medias' production modes and to give rise to small, often at first sight minoritarian, user groups. These in turn hope to take advantage of decentralised, localised modes of organisation while at the same time forming alliances among themselves globally and with traditional organisations.

This contribution sets out with the goal to revisit, discuss and problematise the opportunities and limitations of the concept of post-mass-media and to investigate how post-mass-media are – potentially – realised in the currently emerging documentary nexus and in how far interactive, networked|networking documentary bears the potential to present alternatives to the "new ethic of non-commitment" and the "dead end of post-modernism" (Guattari/Genosko 1996, p. 112), which Guattari rejected.

In this context, we would like to introduce the concept of 'networked|networking' as a companion to discourses on post-mass-media. The notation of networked|networking indicates the conceptualisation of these two concepts as two aspects of one phenomenon, as interdependent with one allowing reflection upon the other, whereby the straight dash links, divides and shows the mirroring of the two. Though networkedness and networking are interdependent, they hold slightly different focuses: 'networkedness' addresses the general interrelated character of these configurations and their ontological nature (i. e. structure, organisation, interface and interaction design etc. in multimedia interactive 'texts'), whereas 'network*ing*' underlines the dynamic, generative and creative processes of 'do*ing* documentary' as a post-mass-media practice; this means as a practice and a process which comprise very heterogeneous agents in a documentary network or worknet – i. e. the complex assemblage which brings such configurations[1] 'alive'.

After a short sketch of emerging 'documentary ecologies' (sensu Nash/Hight/Summerhayes 2015; Aston/Gaudenzi/Rose 2017) and the historical origins of participatory documentary as an alternative to large scale media industries, Guattari's reflections will be brought into dialogue with three emerging paradigms in (interactive) documentary theory:

> discourses around 'the Interactive', including the concept of co-creation;
> current reworkings of the documentary voice in the context of polyphony and plurivocality; and
> Zimmermann and de Michiel's thoughts on the potential of open space documentary. *(2013; 2018)*

In order to remain grounded and avoid getting lost in heady philosophical flights, these reflections will be concertised by analysing one concrete post-mass-media project: *The Shore Line* (Miller et al. 2015) is a collaborative interactive documentary and at the same time a documentary 'worknet' (sensu Latour 2011).[2] It features over forty initiatives from nine countries which are confronting the rise of the sea-level and extreme

1 In the following, the terms 'assemblage' (as coined by Deleuze and Guattari and extended by DeLana), 'configuration' and 'network' (as used by Latour and Law to delineate not only technological setting but technocultural and socio-political interdependencies) will be employed to describe complex interrelational and fluid, dynamically networked and networking networks. In the sense of Guattari and Deleuze, assemblages forge relations with other assemblages – and are at the same time forged by them (cf. among others Deleuze and Guattari 2011 [1980]; Latour 1990; Slack/MacGragor 2006).

2 As Latour remarks, "in network, it's the work that is becoming foregrounded, and this is why some suggest using the word worknet instead" (Latour 2011, p. 6). This statement is congruent with what will be

weather in community-based 'on-the-ground' action-taking as well as mediatised online activities. In *The Shore Line,* very local interventions meet global concerns, and emplaced interaction meets virtual interactivity. This project will serve as a test-stone for the dictum of the participatory and transformative potential of post-mass-media and the hypothesis that "political and social change often emerges from the margins where new creative energy and activity accumulate, far from the pressure of capital flow or nation-state" (Zimmermann / de Michiel 2018, p. 18).

'New documentary ecologies' and the heritage of the collaborative media making

Ever since its beginnings, documentary has been a volatile endeavour. With the advance of 'new media' (which are, as Bolter and Grusin point out in *Remediation* (2000), not that 'new' at all), seemingly novel practices and 'ecologies' have been constituting themselves. Though especially the affordances of interactive and networked media have certainly brought major paradigm shifts in the documentary nexus considered as a complex socio-cultural, socio-political and socio-economic configuration, it would be negligent to lose sight the long tradition of documentary's transformative impetus and ethical charge, especially in early experiments in collaborative practices and community media.

One of the best-known collaborative projects in the history of documentary projects is certainly The Fogo Island Process (Low 1967). In the late 1960s, the National Film Board of Canada (NFB) launched a bundle of experimental initiatives which were to be become the *Challenge for Change Programme*. The idea was to promote social change *through* media intervention by making media *with* those concerned rather than *about* them. In this context, NFB filmmaker Colin Low visited Fogo, an archipelago with around five thousand people off the Newfoundland coast, in 1967. At the time, the citizens were threatened with relocation due to economic change. Low encouraged the islanders to reflect on options for their future through the production of short films. Those films certainly do *not* fall into the category of elaborate media products or even of interest for a wide public. Still, they got a ball rolling on the process of reflection and dialogue among the islanders, and they served as a powerful tool for communicating the collaboratively developed visions with stakeholders in the Canadian government.

This historic digression not only shows that documentary has a long tradition of engagement and interventionist media making (sensu Cizek), but it also strengthens the argument Nash, Summerhayes and Hight bring forth when they suggest that looking at documentary's current transformations is best performed "through the lens of experimentation" which seems to be an invariable in the otherwise highly variable 'documentary project':

concluded in this contribution in terms of a paradigm shift from representation and static networks of collaborations to performative media making and fluid networking.

> as new media technologies and new forms of communication emerge, contemporary documentary makers are engaging in a continual process of reworking the documentary project. They (and inevitably we, as audiences) are reimagining what documentary might become: non- linear, multimedia, interactive, hybrid, crossplatform, convergent, virtual, immersive, 360-degree, collaborative, 3-D, participatory, transmedial or something else yet to clearly emerge. *(Nash et al. 2014, pp. 1–2)*

And in fact: digital technologies and the frantic evolution of alternative modes of production, particularly alternative platforms and infrastructures for distribution and sharing open new ways of conceptualising the participatory dimension of the documentary project in particular; they offer new means for those formerly known as 'documentary subjects' and 'audiences' to become navigators, users, collaborators and co-creators to engage with these forms.

What will be important in the following with regard to the analysis of *The Shore Line* is the fact that we suggest a wide notion of 'interactive documentary', following Aston and Gaudenzi (2017):

> any project that starts with an intention to document the 'real' and that uses digital interactive technology to realize this intention can be considered an interactive documentary. This is a deliberately broad definition of i-docs, which is platform agnostic. […] The definition provided here recognizes the fact that interactivity in i-docs often goes beyond a 'delivery mechanism' to incorporate processes of production. […] Interactivity is seen as a means through which the viewer is positioned within the artefact itself, demanding him, or her, to play an active role in the negotiation of the 'reality' being conveyed through the i-doc.
>
> *(Aston/Gaudenzi 2012, pp. 125–126)*

This implies that we will focus less on documentary *is* than what interactive participatory documentary *does* – or at least potentially can do. Accordingly, the leading questions will be: What does 'do*ing*' documentary (as a dynamic process) mean in a post-mass media era? What can be achieved through networked|networking documentary? And in how far do emerging participatory documentary practices realise Guattari's vision of post-mass-media as a "humanistic approach to agency" (Gaudenzi et al. 2017, p. 2)?

Entering the networked|networking nexus of The Shore Line – participation and polyphony in practice

The Shore Line (Miller et al. 2015) thematises our relationship to the ecosystems of the coastal lines – the threats that the growth of tourism, the increase of the dumping of industrial waste and development projects pose for vulnerable biomes.

To outline the urgency to change our ways of life, *The Shore Line* presents 43 short videos in the form of an 'interactive storybook' in which people from nine countries address environmental, economic and social problems which arise in the course of the destruction of our costal lines – and which also potentially inspire a change in the way we think of and deal with our environment. *The Shore Line* visualises quantitative data with interactive charts and graphs and at the same time enables insight into qualitative research; above all, however, it forges a space for community action taking and encourages especially young people to participate in the fight against the destruction of coastal environments and the rise of the sea level. Beyond representing existing projects, the transprofessional team of *The Shore Line* hopes to "contribute to a more just and sustainable future" (cf. Director's Note) – also with the intent to extend the established network of documentary makers who are dealing with the theme to more 'densely knitted' collaborative worknets of activists, environmental scholars, educators and media makers. By different means – as will be seen in detail in the following – co-creation is invigorated, and traditional modes of production are creatively bypassed. The impetus is to encourage further local as well as global projects that are inspired by the ventures presented in the interactive documentary. The networked web documentary thus radiates beyond the medial borders of the Internet and at the same time functions as an active appropriation of a medial spaces through interactively engaged and actively participating user.

'The Interactive' – From interactivity to interaction, participation and co-creation

In the context of interactive documentary, four interrelated concepts need clarification as they are the foundation of what can been described as networked|networking: interactivity, interaction, participation and co-creation. All four forms of engagement can be subsumed under the concept of 'the Interactive' with a capital 'I'. 'The Interactive' will be understood as a multidimensional phenomenon in which different agentic interactors and their actions[3] form together dynamic ecosystems.[4]

The most obvious though basic forms of 'the Interactive' are certainly interactivity and interaction. However, already these two forms need to be distinguished: studying processes of interactivity means to mainly focus on the relationship 'user to medial text'. In the context of a critical understanding of interactivity, it has to be marked that

3 Interactors comprise both human and non-human agents – i.e., not only users, media makers and the subjects of media texts but also technical systems and technological and social networks, expectations and discourses of power. In this sense, the following reflections are inspired by the recently modified notions of Actor Network Theory (Law 1999, Latour 1999, Krieger 2014) as well as media ecological trains of thought.

4 Though the concept of media ecology certainly needs further clarification, the metaphor will be used here in the sense as proposed by Fuller 2005, Scolari 2013 and Fetzner and Dornberg 2018.

there is also a 'dark side' to this form of engagement: the fact that it can easily turn into interpassivity (Pfaller 2017; Žižek 1998) or what Winston, Vanstone and Chi disdain of as "clicktivism" (Winston et al. 2017, pp. 60 f.). Both clicktivism and interpassivity are states of passivity or in-activity in the socio-political sense: perceived activity or the *potential* of interactivity become 'Ersatz' for real engagement. In configurations which are marked by interactivity in this narrow sense, the user can browse through content without contributing to the configuration or entering into meaningful exchange with others. Thus, it is only one step from interactivity to interpassivity: interactivity "becomes an illusion", a relapse into "dysfunctional interactivity" (Winston et al. 2017, p. 60; emphasis in the original), and – as Guattari stated with regard to mass-media and a presumed multitude of content to consume – the user feels as if she/he were in control without being conveyed any agency at all: "The paradox of user control, in fact, becomes that of the illusion of choice within which the user is offered up for a form of soft domination." Users become passive consumers, they are put off with "superficial promises of consumer empowerment" (Palmer 2003, p. 128): "although ceaselessly promoting the advantages of 'user control' as a form of democratic participation, dominant forms of real time media conceal their tendency to isolate and separate individuals" (Palmer 2003, p. 129). The similarities to Guattari's critique of the post-modern mass-media era and what he calls "deterritorialization" – the "destruction of social territories, collective identities" and "systems of traditional values" (Guattari/Genosko 1996, p. 110) – are striking.

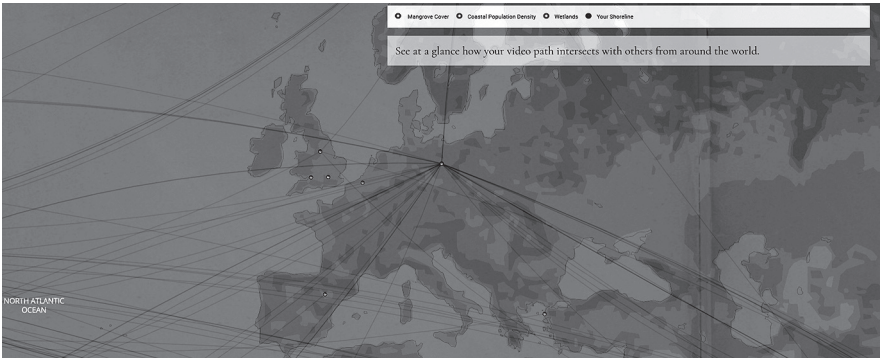
A first step out of the "paradox control", to use Palmer's notion, is interaction. Interaction, in contrast to interactivity, comprises interpersonal exchange, thus it bears a *social* dimension. In environments that emphasise interactional exchange between agents, communicational processes are more important than representation (and self-representation). In this sense, we are witnessing a first step towards a "re-territorialisation" (Guattari/Genosko 1996, p. 110). Interpersonal exchange can either take place within media configurations – or it can take place within the larger ecological network in which medial 'texts' are embedded in the sense of Guattari's different interdependent ecologies. In the case of *The Shore Line*, this is for example the case due to the fact that the web site invited user-interactors to get into contact with each other and to exchange material – and to start an exchange from different perspectives,[5] to further discuss concerns and to develop new ideas.

One step further out of a posture of resignation is *participation* or to be more specific: *creative* participation. This form of engagement comprises participation *in* media networks as opposed to participation *through* media worknets which will be subsumed under the concept of 'co-creation' in order to make a clear distinction. Notwithstanding the fact that the advent of the so-called web 2.0 has certainly contributed to a rise of alternatives to established cultural industries and though there have certainly been

5 This pluri-perspective discussion is closely connected to the concept of polyphony, which will be discussed later.

1.1–1.2 Screenshots from the menu page of *The Shore Line* – Like in a horizontally unfolding scroll documentary, context becomes spatialised rather than linearly temporalised

tendencies to a formation of what Ratto et al. describe as "DIY citizenship" (Ratto 2014, p. 1), the *possibilities* offered by digital interactive must not be confused with the actual *realization* of participatory practices – a fact that (as interpassivity) relativises also the impact of participatory documentary. Jenkins (2006), Corner and Nash (2016), Carpentier (2011) and others have described this phenomenon as the 'participation gap' – the fact that though there certainly *is* a democratisation of media-making (and thus documentary-making) facilitated through the web 2.0, there are still groups of people who are not able to actively engage in these discourses. Most often it is not only the inaccessibility of means of production but a lack of self-confidence in active, creative participation or a lack of a sustainable infrastructure, both adverse factors that can be avoided by providing co-creative frameworks for participation, that preclude participation. As such, when speaking of participation in the post-mass-media era, both the obstacles of the phenomenon of interpassivity and the participation gap need to be considered. This brings us to the most complex form of engagement.



2.1–2.2 Screenshots from the 'Atlas' mode of navigation of *The Shore Line*, one a general sight of paths, the other personalised with connections of the user

Co-creation in our understanding comprises a *socio-cultural* and *socio-political* dimension, it is creative and interpersonal, directed towards the network as well as the process of networking, and thus directly links to Guattari's line of approach when considering political action and empowerment in times of post-mass-media. Foremost, however, the concept of co-creation in the context of emerging documentary ecologies stresses the *transformative* potential of interactive documentary assemblages and the collaborative creation of cultural value beyond medial artefacts. Since co-creation in this understanding encompasses aspects of creative participation as well as social exchange, putting emphasis on the broader impact of documentary practices, co-creation can be regarded as the most far reaching form of 'the Interactive' in terms of its *quality* of engagement and its depth. It involves more than the individual (who can, for example, experience interactive agency in rather closed networked documentary assemblages), and it transcends creative participation due to its wider transformative effects. In this context, co-creative practices seek to create spaces in which new knowledge and cultural value can emerge and in which (social) change can take place. As such, co-creative documentary projects

go beyond 'harvesting' content from creatively participating subjects; rather, they are interested in working together *with* all agents in a participatory network (respectively worknet) as collaborators and creative partners throughout the production process and as stakeholders of a shared cause.

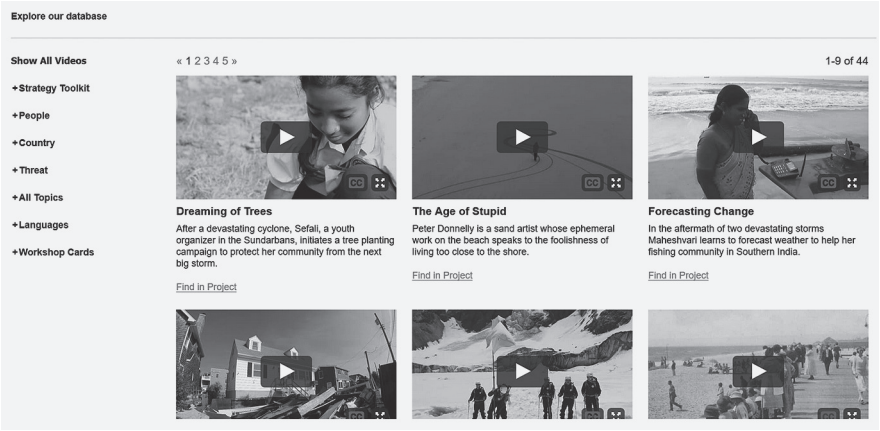
Ideally, co-creative documentary projects are networks and worknets in the most literal sense, as they merge on-line and "on-ground" actions (cf. Miller/Allor 2016, p. 59), going beyond apparent opposites such as 'real vs. virtual', 'new vs. old', 'offline vs. online' or 'global-local'.[6] Through a suspension of binarisms and the horizontal organisation of co-creative post-mass-media networks

> co-creation offers alternatives to a single-author vision, and it is a constellation of media production methods, frameworks, and feedback systems. Projects emerge out of process, and evolve from within communities and with people, rather than being made for or about them.
> The concept of co-creation reframes the ethics of who creates, how, and why.
> *(Cizek/Uricchio 2019)*

However, how can the different modes of 'the Interactive' go hand in hand – and how can phenomena such as interpassivity and the participation gap be avoided? First of all, *The Shore Line* offers three modes to interactively explore the material with each mode featuring creative approaches to visualise the interdependencies or 'networkedness' of causes and effects as well as global ecological implications and the impact of environmental projects. However, one has to see that the project is a more complex assemblage than a mere website. Considering *The Shore Line* in 'its depth and wideness' – i. e. including the networking 'at the back-end' of the network of *The Shore Line* and beyond the website – participation and co-creation come to their full potential. And yet, the mode of how the material is arranged mirrors the process of its production and forms the framework for further engagement.

The first mode presents content thematically structured in chapters. By scrolling through content like in a horizontally unfolding textbook (illustrations 1.1 and 1.2), the user-interactor can interactively retrieve personalised information. The second mode – the 'Atlas' mode and the therein included 'Paths' mode (illustrations 2.1 and 2.2) – remediate a geographical map by visualising both the simultaneity of the very local and the global nature of the concerns alongside the networked action-taking around the globe. Through

6 In this sense, co-creative networked|networking documentary projects can present a remedy to a phenomenon that Miles deplores when stating that occur all too often in interactive documentary (in the sense of web documentary) whereby "interaction design [is] reduced to the pragmatics of information architecture. Such works do not change architectonically as a consequence of their viewer's actions. Exceptions to this instrumentalised linking – an informatics of connection rather than an aesthetics of relation – abound in online media, yet, interestingly, in the milieu of interactive documentary the majority of works remain resolutely fixed by the imprimatur of an auteurism that remains largely untroubled (and unproblematically celebrated)" (2014, p. 25). This position links back to both Guattari's rejection of the hypnotising and paralysing of mass media and the difficulties brought into play by interpassivity.



3 Screenshots from the database mode of *The Shore Line* – Videos (co-)produced by the participants are presented in a curated searchable archive

a global atlas, the user can explore the 43 videos by location and – in an interactive simulation – see what the threats to her/his own ecosystem are.

The third mode – the navigation by database (illustration 3) – presents topical arrays of videos, structured by keywords, e. g. 'people', 'country', etc. This mode also comprises a list of actions that are already taken in different projects as well as their successes.

> The idea of networkedness and interdependencies between agents and the idea of networking becomes most obvious in this rubric as well as in the 'Atlas' mode – a mode that encourages users to also further discuss "how data and cartography can help us to plan for the future and connect communities or alternatively be used to reinforce power relations" (Miller 2015). In most cases these are alternatives to large scale organisations like Greenpeace and others which feature large numbers of rather passive members. Thus, the map is a dynamic visualisation of the emerging network of people actively participating in both media making and activities. Or, as Adrienne Maree Brown suggests in one of the videos: this proves "that emergence takes notice of the small actions and connections that become systems, patterns, ecosystems and more". *(Miller 2018, p. 121)*

Moreover, the navigation mode titled 'Paths' allows users to follow the routes other users have taken through the material; it enables them to locate activist groups and to see how their own video path intersects with others from around the world. This again aims at fostering a feeling of community among user-interactors and encourages further discussion and action-taking – or in other terms: networking in worknets outside the web-documentary – merging "online and on-ground" actions (Miller 2018, p. 121) – which in fact – needs to be a consequence of media interactivity, otherwise

one falls prey to interpassivity through 'clicking on the world', to take up the title of a contribution by Nash (2014) on user engagement.

To avoid such virtual 'Ersatzhandlungen' or sublimation, Miller et al. link each *representation* with a call for action. Most explicitly, the partly subversive media usage takes place in the section called 'Strategy Toolkit' – a sub-mode of 'navigation by chapter' – which consists of a curated set of questions, activities and additional resources based on 13 interdisciplinary strategies of taking action; among others, it invites the user to organize workshops together with scholars and experts. Here, networking practices go far beyond the production of interactive documentary and the interaction with the textual manifestation, i. e. the web project. *The Shore Line* tries to promote existing collaborations, to encourage new connectivities between major actors and to stimulate solution-based learning taking the web-documentary as a "catalyst to identify local problems and to consider diverse strategies of getting involved through education, environmental law, art, ecology, policy, activism and more" (Miller 2015).

This mode can certainly be seen as vital element in this interventionist networking and a shift of a primarily representational paradigm of documentary making to a performative paradigm which encourages co-creative action taking: *The Shore Line* not only documents the status quo; rather, the user-interactors are invited to get involved in their own communities. This is certainly due to the fact that instead of producing one documentary film on the urgency of action-taking such as e. g. Guggenheim and Gore do in An Inconvenient Truth (Guggenheim 2012), the project puts emphasis on a "composite of easily digestible micro-pieces" (Miller 2017) – both prefabricated micro-pieces, e. g. theoretical articles, video-vignettes, podcasts etc. as well as user-generated material. These can be easily shared via Facebook and twitter and 'invade' other (social) networks to reach others potentially interested in the content – or in other terms: co-creative interventionist media making bypasses the procedures of mass-media industry by going viral and exploiting the 'spreadability' of networked media.[7]

Polyphony, plurivocality and the concept of documentary voice

In recent discourses on participatory documentary, the concept of polyphony has been vigorously discussed anew (cf. among others Aston/Odorico 2018; Zimmermann 2018; Miller 2018; Wiehl 2018) – though the concept itself originally goes back to the 20th century Russian art theorist and novelist Michael Bakhtin. According to Bakhtin, a polyphonic work of art "is constructed not as the whole of a single consciousness, absorbing other consciousnesses as objects into itself, but as a whole formed by the interaction of several consciousnesses, none of which entirely becomes an object for the other".

7 For the concept of spreadability in networked media, cf. Jenkins/Ford 2013.

And he continues that this implies "a plurality of independent and un-merged voices and consciousnesses, a genuine polyphony of fully valid voices" (Bakhtin 1984, pp. 6–7; quoted in Aston/Odorico 2018, p. 64). More present time media theories – especially those taking into account the aesthetic and the socio-political dimension of media – would probably describe Bakhtin's claims in terms of 'participation' or 'co-creation', and in fact, as sketched above when entering the 'new' documentary nexus, collaborative interactive factuals have the capacity to comprise multiple perspectives: "Polyphonic new media practices shift documentary from the temporal figured as events unfolding in chronological order to the spatial where engagements, experiences, ideas, participation, practices, technologies, and voices craft a spatial mesh" (Zimmermann 2018, p. 10). Moreover, polyphonic participatory media are fluid rather than stable and are "less about opposites or binaries and more about intertwingled connections" (Aston/Odorico 2018, p. 72). In this sense, out of the plurality, juxtaposition and heteronomy of micropolitical media, new forms of consciousness raising, thinking outside the box and 'making things matter' can rise.

> Polyphony is a useful theoretical construct to understand the significant shifts in new media practices from a single authorial vision to a multiplicity of voices that come together to generate and activate new understandings of subjects or events.
>
> *(Zimmermann 2018, p. 11)*

Polyphony and plurivocality are not only etymologically linked to the concept of 'voice'; in the context of interactive participatory documentary assemblages, the notion of 'voice' links to a longstanding theoretical conceptualisation. Following Nichols, one can thus differentiate between at least three dimensions of documentary 'voice'. The first of these is 'voice' as "recruited voices" (Nichols 1983, p. 27), i. e. interview, as well as in our case of participatory documentary and co-creative practices the so-called 'user-generated content'. The second is "the textual 'voice' spoken by the style of the film as a whole"– i. e. how in the assemblages the multiplicity of codes, including those pertaining to recruited voices, are orchestrated into a textually sedimented, networked 'texture'. And the third dimension is "the surrounding historical context, including the viewing event itself, which the textual voice cannot successfully rise above or fully control" (Nichols 1983, p. 27). Especially this last notion of 'voice' presents a highly attractive concept with regard to interactive documentary assemblages, as it brings into play the performative dimension of 'doing documentary' as a complex relational networked|networking configuration.[8] As such, it points beyond only ephemeral manifestations in actual 'textual sedimentations' – the networkedness of networked|networking assemblages – and allows one to take into account the actual often participatory network*ing* processes. In this sense,

8 In this relation, it needs to be added that the 'context' in the case of interactive networked media of course goes wide beyond what Nichols was thinking of in term of documentary *film*.

> a polyphonic model counters singular voices with choral multiplicity. It dismantles the unified linear three-act and genre-derived structures embedded in some feature-length documentaries and most mass cultural forms. Polyphonic new media projects avoid causal and explanatory recountings to create architectures for layered multiple temporalities that unlock new ways to consider complex interconnected social and political issues. *(Zimmermann 2018, p. 11)*

Corner and Nash (Corner 1999; Nash/Corner 2016) take a similar stance when speaking of ethically 'charged' documentary which, thanks to its long heritage since Grierson, can play a role in democratic civics as it has the potential to not only promote knowledge but also engage people as active citizens. Closely linked to the ethical charge of documentary is the idea of its *transformative* potential or strategic usage. In the context of documentary film, this implies encouraging audiences as 'informed citizens' to assume a position or to take socio-political action due to the relatedness of the issues negotiated to reality – an appeal that goes contrary to what Guattari deplores as the hypnotising and sedating function of mass-media. Rather than mere consumption, transformative and ethically charged sites offer 'open spaces'. In *The Shore Line,* polyphony becomes *enacted*. The configuration opens a platform on which participants can discuss "how place, traditions, gender, race, age and economic circumstances inform local methods of resistance or resilience" (Miller 2018, p. 116) and where initiatives can connect to each other and form alliances for future actions. The individuals featuring in *The Shore Line* thereby "draw on local knowledge and offer a wide range of responses to coastal challenges" (Miller 2018, p. 116) and thus contribute to what Guattari describes as a 're-territorialisation' of the social.

Opening spaces for participation and taking action

This brings us to the third concept that is closely related to Guattari's thought on post-mass-media and his "ecosophy" (Fuller 2005, p. 5): the concept of emerging participatory documentary practices in terms of open spaces. 'Open space new media projects', such as those depicted by Zimmermann / de Michiel (2013; 2018), employ working principles from various disciplines including literature, music, environmentalism, urban planning, landscape design, literary theory, relational aesthetics, design theory, social practice art, political theory and new media theory. Notwithstanding differences in the theoretical approaches to openness in this context, what unites most conceptualisations of open space is that they try to balance the relationships between natural and built ecologies, between enclosure and access, naturally growing and pre-constructed, virtual and physical. Open space documentaries are built on "ideas of collaboration, micro-territories, contingency, horizontality, bottom up, multiple agency, decentralization, migration across media platforms and through different

communities; permeability and mutability are key" (Zimmermann / de Michiel 2013, p. 356). In *The Solace of Open Spaces,* Ehrlich speaks of "a geography of possibility" (Ehrlich 1985, p. 9) – i. e. dynamic environments which are open to development, surprise, inspiration, change, which allow to imagine possible futures, and which potentially become the site where transcultural communication can emerge.

In open space documentary, what has been described as the documentary triangle of subject, filmmaker and audience – a paradigm that is characteristic of mainstream media and that has informed traditional documentary studies for decades – is replaced by a circularity to 'doing documentary'. Those formerly known as documentary 'authors' become place-based designers or "context-providers" (Daniel 2008); those formerly known as 'subjects' become active participants in creation, bringing in their own stories, telling them in their own words and co-authoring the medial work; and those formerly known as 'audiences' become engaged interactors or even participants in ongoing discourses. In this sense, open space projects "explore the terrain where technologies meet places and people in new and unpredictable ways, carving out spaces for dialogue, history, and action" (Zimmermann / De Michiel 2018, p. xx).

New media open space documentary projects are based on a collaboration ethos and networking; they try to promote dialogue, debate and response to urgent social and political issues. Often, such projects are manifold and comprise different manifestations which are adapted to the specific needs of physical sites as well as particular media environments – this helps to encompass the participation gap. In order to reach out (not so much in quantity but in quality), they "migrate across archives, dialogues, essays, live media events, performances, websites, and video" (Zimmermann / de Michiel 2018, p. xx).[9]

For *The Shore Line,* Miller developed highly individual and case-specific schemes to engage participants at different points of conceptualisation, production and dissemination. The segments from Norway, Indonesia and Chile, for example, were shot by participating directors. In other cases, she launched cooperation with local journalists. At the same time, Miller worked with absolute 'amateurs': in Carti Sugdup, an indigenous community in Panama, where Miller and her team trained a local youth group to contribute to the web-site. Thus, though depicting very local initiatives, the project spans the entire globe and there is 'a lesson to be learned' for other communities from each video. As such, the site features projects as diverse as a sustainability architect in Bangladesh designing floating schools, an indigenous organiser in Panama helping the community of a sinking island resettle on the mainland, a science fiction writer from Canada who webs resilience into storylines, and many more (cf. Miller 2018, pp. 14 f.). This can be

9 This form of sometimes radical participation and the redefinition of the roles of documentary authors and audiences, participants and subjects, however, does not imply that projects are completely without a concept or a 'leader'. Rater the contrary is the case: in order to orchestrate the incentives and intentions, visions and activities of the different co-creators, a well-designed outline and elaborate architecture is requisite. As Miller remarks: "Curating polyphony is a design strategy as much as a careful curation of people and places." (Miller 2018, p. 120)

seen as a realisation of what Guattari describes in "Entering the Post-Media Era" and of what Fuller in his book *Media Ecologies* remarks on:

> Guattari's use of the term ecology is worth noting here, first, because the stakes he assigns to media are rightly perceived as being profoundly political or ethico-aesthetic at all scales. Aligning such political processes with creative powers of invention that demand 'laboratories of thought and experimentation for future forms of subjectivation' also poses a demand for the inventive rigor with which life among media must be taken up. Equally, Guattari's repeated linkage and cross-fertilization of the three modes, 'mental,' 'natural,' and 'social' of ecology within 'ecosophy' provides insight into the way that any of these or other modes of an ecology always demand carrying over into another mode, another universe of reference, and always another, in order for these laboratories, whether in texts, persons, movements, or at other scales, to have any function. *(Fuller 2005, p. 5)*

Moreover, the process of 'do*ing* documentary' and interventionist media mak*ing* was seen as equally important in the re-appropriation of agency as the final product. This included using the work in progress on *The Shore Line* as a catalyst to mutually inspire other projects in progress. Rather than waiting for a definitive launch, Miller et al. developed a provisional website where participants could showcase their work while they were still developing it. Thus, other participants could become co-creators and co-producers – even remotely. This allowed them to foster a network beyond traditional professional production networks. As Miller (2018, p. 118) describes, when leading a media workshop for youth in Panama, they shared the work in progress by participants from India and Norway with the participants. "The Panamanian group was enthusiastic to see what other participants were working on, and as a result they saw their own efforts as part of a larger initiative" (Miller 2018, p. 118). The provisory website became a mainstay at that moment in the production process:

> Our interim site was an instance of 'in-reach', a way to foster connections between and amongst our emergent network and the inspiring individuals we were meeting in each location. Finally, our interim site worked as a public sketch pad. It was an open platform where we could adapt, explore and begin to identify the emergent aesthetics, themes, and connections between each place and story. *(Miller 2018, p. 118)*

After the launch of the official interactive *The Shore Line* site, this interim platform was transformed into a site for further networking and an educators' exchange. Once again, the aim was to web a network of engaged creatives, teachers and activists to share resources and learn from each other's experiences.

Thus – though *The Shore Line* certainly does not reach out to the masses such as (the very rare) documentary box-office hits – the *quality* of engagement, whether in form of interactively exploring the site, participating on-line or co-creative action-taking

on-ground, the impact of the project is not inconsiderable. And in fact, Miller underlines that "impact should not be conflated with exposure since getting a project to the right audience can be more effective than trying to reach everyone" (Miller 2017).

Concluding reflections – from representation to performativity

The central implication that underlies all these considerations – and what can be drawn as a summarising conclusion – is that we are currently witnessing a paradigm shift in documentary practices from a representative to a performative paradigm. Thereby, performativity affects all levels of production and dissemination, local engagement and global interaction; and collaborative and participatory practices recalibrate the relationship between authors, media designers, audiences, participants, content and context into more open dynamic assemblages. In this regard, networked|networking co-creative open space at least to some degree realises what Guattari hoped to be the future of post-mass-media:

> [W]hat are passive attitudes today may perhaps begin to evolve. […] The element of suggestion, even hypnotism […] will vanish. From that moment on, we can hope for a transformation of mass media power that will overcome contemporary subjectivity, and for the beginning of a post-media era of collective-individual reappropriation and an interactive use of machines of information, communication, intelligence, art and culture. *(Guattari 2013, p. 27)*

As the re-contextualisation of Guattari's thoughts within current discourses in documentary theory has shown, not only Guattari's concerns in terms of the participation gap and interpassivity are still with us, but also his vision of participatory media practices in which collaborative and co-creative media making shifts power relations "to reconfigure interconnections among media, people, and place" (Hudson 2019, p. 3). However, as the discussion of current strategies and the example of *The Shore Line* have also shown, this requires thoughtful design, mutual respect between all participants and adventurous openness to experimentation to entangle the political and the artistic, community action taking and individual engagement.

Performative networked|networking documentary configuration can take many different forms and open various entry points for participation. As has been seen, networked|networking stimulates qualitative shifts in our understanding of documentary media making: from an understanding of 'doing documentary' in terms of a representative towards a deeply performative practice. New alignments between different media gain influence – not only due to technological change but foremost due to new forms of *thinking* about and *envisioning* the entanglement of social ecology, mental ecology and

environmental ecology. Thus, post-mass-medial configurations at least bear the potential to "flee from familiar perspectives and contexts", to become "a manipulation of manipulation" (Apprich et al. 2013, p. 8), to "catch legacy epistemologies off guard, so [that] new alignments, allies, and politics can break open" – and they can "offer hope for agency, community, destabilizations, and mobilizations" (Hudson 2019, pp. 6–7). Sure, as the concept of post-mass-media indicates in its appellation, configurations such as *The Shore Line* certainly won't mobilise the masses. But as so often, in terms of meaningful participation and co-creative action-taking, it might be the *quality* of engagement that paradoxically is weightier than quantity.

Bibliography

Clemens Apprich / Josephine Berry Slater / Anthony Iles / Oliver Lerone Schultz (Eds.): *Provocative alloys. A post-media anthology*. London/Lüneburg 2013.

Clemens Apprich: Remaking Media Practices – From Tactical Media to Post-Media. In: Clemens Apprich / Josephine Berry Slater / Anthony Iles / Oliver Lerone Schultz (Eds.): *Provocative Alloys: A Post-Media Anthology*. Lüneburg 2013, pp. 122–140.

Judith Aston / Sandra Gaudenzi: Interactive documentary: setting the field. In: *Studies in Documentary Film 6* (2), 2012, pp. 125–139.

Judith Aston / Stefano Odorico: The Poetics and Politics of Polyphony: Towards a Research Method for Interactive Documentary. In: *Alphaville Journal of Film and Screen Media* (15), 2018, pp. 63–93.

Mikhail Bakhtin. *Problems of Dostoevsky's Poetics*. Minneapolis 1984.

Nico Carpentier: *Media and participation. A site of ideological-democratic struggle*. Bristol/Chicago 2011.

Katerina Cizek / William Uricchio: Collective Wisdom. Co-creating media with communities, across disciplines and with algorithms, 2019. Available online at https://wip.pubpub.org/ (15.02.2021).

John Corner: Documentary in a Post-Documentary Culture? A Note on their Forms and Functions. 1999. Available online at http://lfbxmljy.blog.sohu.com/176601804.html (15.02.2021).

Gilles Deleuze / Félix Guattari: *A thousand plateaus. Capitalism and schizophrenia*. London 2011 [1980].

Edward Downes / Sally McMillan: Defining Interactivity: A Qualitative Identification of Key Dimensions. In: *New Media & Society 2* (2), 2000, pp. 157–179.

Gretel Ehrlich: *The Solace of Open Spaces*. New York 1985.

Daniel Fetzner / Martin Dornberg: Experimental Polyphony: On the Media Ecological Research of Intermediate Bodies. In: *Alphaville Journal of Film and Screen Media* (15), 2018, pp. 124–146.

Matthew Fuller: *Media Ecologies: Materialist Energies in Art and Technoculture*. Cambridge 2005.

Sandra Gaudenzi / Mandy Rose / Judith Aston: *i-docs – The Evolving Practices of Interactive Documentary*. New York 2017.

Félix Guattari: Du postmoderne au postmédia. (1985). In: *Multitudes*, 34, 2008, pp. 128–133.

Félix Guattari: Towards a Post-Media Era. In: Clemens Apprich / Josephine Berry Slater / Anthony Iles / Oliver Lerone Schultz (Eds.): *Provocative alloys. A post-media anthology*. London/Lüneburg 2013, pp. 26–27.

Félix Guattari / Gary Genosko: *The Guattari reader*. First published. Oxford/Cambridge 1996.

Dale M. Hudson: States of Environmentalist Media. In: *Media + Environment 1* (1), 2019, pp. 1–8.
Dale M. Hudson / Patricia Rodden Zimmermann: *Thinking through digital media. Transnational environments and locative places*. New York 2015.
Henry Jenkins / Sam Ford / Joshua Green: *Spreadable media. Creating value and meaning in a networked culture*. New York 2013.
Henry Jenkins: *Convergence culture. Where old and new media collide*. New York 2006.
Rosalind E. Krauss: *"A voyage on the North Sea". Art in the age of the post-medium condition*. London 2000.
David J. Krieger / Andréa Belliger: *Interpreting Networks. Hermeneutics, Actor-Network Theory & New Media*. 1, Bielefeld 2014.
Lev Manovich: *The language of new media*. Cambridge 2001.
Bruno Latour: Technology is society made durable. In: *The Sociological Review 38* (1), 1990, pp. 103–131.
Bruno Latour: On Recalling ANT. In: John Law (Ed.): *Actor network theory and after*. Oxford 1999, pp. 15–25.
Bruno Latour: Networks, Societies, Spheres: Reflections of an Actor-Network Theorist. In: *International Journal of Communication* (5), 2011, pp. 796–810. Available online at http://www.bruno-latour.fr/sites/default/files/121-CASTELLS-GB.pdf (15.02.2021).
John Law: After ANT – complexity, naming and topology. In: John Law (Ed.): *Actor network theory and after*. Oxford 1999, pp. 1–14.
Jean-François Lyotard: *La Condition postmoderne*, Paris 1979.
Sally McMillan: Exploring Models of Interactivity from Multiple Research Traditions. User, Documents and Systems. In: Leah A. Lievrouw (Ed.): *Handbook of new media*. London 2006, pp. 205–229.
Adrian Miles: Materialism and Interactive Documentary: Sketch Notes. 2014. Available online at http://www.consiliencelab.org.au/mediaobjectslab/files/2014/07/Documentary-Sensemaking.pdf (15.02.2021).
Elizabeth Miller: The Shore Line as Polyphony in Practice: A Case Study. In: *Alphaville Journal of Film and Screen Media* (15). 2018, pp. 113–123.
Elizabeth Miller; Martin Allor: Choreographies of collaboration. Social engagement in interactive documentaries. In: *Studies in Documentary Film 10* (1), 2016, pp. 53–70.
Elizabeth Miller et al.: http://theshorelineproject.org/#!/home (15.02.2021).
Kate Nash / John Corner: Strategic impact documentary: Contexts of production and social intervention. In: *European Journal of Communication* 31 (3), 2016, pp. 227–242.
Kate Nash / Craig Hight / Catherine Summerhayes: Introduction: New Documentary Ecologies. In: Kate Nash / Craig Hight / Catherine Summerhayes (Eds.): *New Documentary Ecologies. Emerging Platforms, Practices and Discourses*. New York 2014, pp. 1–10.
Kate Nash / Craig Hight / Catherine Summerhayes (Eds.): *New Documentary Ecologies. Emerging Platforms, Practices and Discourses*. New York 2014.
Kate Nash: Clicking on the World: Documentary Representation and Interactivity. In: Kate Nash / Craig Hight / Catherine Summerhayes (Eds.): *New Documentary Ecologies. Emerging Platforms, Practices and Discourses*. New York 2014, pp. 50–66.
Bill Nichols: The Voice of Documentary. In: *Film Quarterly 6* (3), 1983, pp. 17–30.
Daniel Palmer: The Paradox of User Control. In: *Design Philosophy Papers* 1 (3), pp. 127–135.
Robert Pfaller: *Interpassivity. The Aesthetics of Delegated Enjoyment*. Edinburgh 2017.

Matt Ratto: Introduction. In: Matt Ratto / Boler Megan (Eds.): *DIY citizenship. Critical making and social media*. Boston 2014, pp. 1–27.
Carlos A. Scolari: Media Ecology. Exploring the Metaphor to Expand the Theory. In: *International Journal of Communication* (7), 2013, pp. 1418–1441.
Howard Slater: Post-Media Operators. In: *README*! New York 1999, pp. 398–99. (Edited and abbreviated version of a text posted on the Nettime mailing list, 10 June 1998 repr. In: Clemens Apprich / Josephine Berry Slater / Anthony Iles / Oliver Lerone Schultz (Eds.): *Provocative Alloys: A Post-Media Anthology*. Lüneburg 2013, pp. 28–43.)
Josephine Berry Slater / Anthony Iles: Provocative Alloys: An Introduction. In: Clemens Apprich / Josephine Berry Slater / Anthony Iles / Oliver Lerone Schultz (Eds.): *Provocative alloys. A post-media anthology*. London/Lüneburg 2013, pp. 6–13.
Jennifer Slack / Wise MacGragor: Cultural Studies and Communication Technology. In: Leah A. Lievrouw (Ed.): *Handbook of new media*. London 2006, pp. 141–162.
Brian Winston / Gail Vanstone / Wang Chi: *The act of documenting. Documentary film in the 21st century*. New York: 2017.
Patricia Zimmermann: Thirty Speculations Toward a Polyphonic Model for New Media Documentary. In: *Alphaville Journal of Film and Screen Media* (15), 2018, pp. 9–15.
Patricia Zimmermann, Helen de Michiel: *Open space new media documentary. A toolkit for theory and practice*. New York 2018.
Patricia Zimmermann, Helen de Michiel: Documentary as Open Space. In: Brian Winston (Ed.): *The documentary film book*. Basingstoke 2013, pp. 355–365.

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Common Images

What Post-Media Does to Cinema

Introduction

In the late 1980s, Félix Guattari prophesied the participatory turn that would derive from the advent of new media and web 2.0 when he forged the notion of post-media. The future post-media era, from a point of view that he himself recognised as utopian, and which was also profoundly political and radically visionary, would be an era in which the collective-individual reappropriation of mass media technologies by an infinite number of heterogeneous singularities and subjects-groups would produce a multiplicity of 'collective assemblages of enunciation' (Guattari 2014, p. 136) and launch essential processes of subjectivation and resingularisation. Guattari's concept of post-media, which describes a transition from a period dominated by the hegemonic discourses and representations produced by mass media to an historical moment in which decentralised post-media subjectivities would leave behind the classic dichotomy between producer and consumer of information and images, has since been reactivated, reappropriated, revised – at times under the variant of 'post-medium' – and redefined by many other media and art theorists (Rosalind Krauss, Howard Slater, Peter Weibel, Lev Manovich, Domenico Quaranta, among others) to reference diverse contemporary media and sociocultural phenomena and aesthetic realities.

This paper aims to apply the Guattarian notion of post-media for the consideration of a series of recent non-fiction video and cinematographic practices based on the recycling and editing of vernacular videos found in social networks, video hosting and livestreaming platforms.[1] The concept of *common images* is proposed, following the writings of Negri and Hardt (2009), to characterise the condition of images in these works and, more broadly, in our digital participative environments. In this regard, it is a question of asking what consequences the present-day post-media momentum has had on non-fiction cinematic and video art. What major transformations has non-fiction cinema undergone since the beginning of the post-media era in terms of the

1 For further materials on these artworks, see the activities and online ressources of the research-creation collective After Social Networks (www.after-social-networks.com).

politics and aesthetics of the representation of the real, the archive and the ecology of images? How is the relationship between non-fiction cinema and the world altered in a post-mediatic context? This article intends to show how certain post-cinematic artworks shed light on the possible avenues to explore in the reformulation and critical re-elaboration of virtual participative culture through the arts within a post-media regime.

1 Post-media subjectivities, YouTube and art

Guattari's post-media era is characterised by the end of the passive attitude of mass media audience, who adopt, for the first time, an active and productive attitude outside the centralised structures of power and control. The 'abandonment to the image' (Guattari 2014, p. 433) characteristic of the viewers of 'neuroleptic' television, the homogenised subjectivity 'subjected to mass media' (Guattari 2014, p. 441) is transformed into a creative post-media subjectivity, which reappropriates the 'information, communication, intelligence, art and culture machines' (Guattari 2014, p. 429). The collective interactivity linked to this inherently post-media reappropriation leads, in the long term, to a 'reinvention of democracy' (Guattari 2008, p. 133) previously based on consensus and allows for new modalities of cooperation, dialogue and consultation between varied singularities. Dissensus is central to Guattari because he sees it as creation and inventiveness as opposed to the consensus distinctive to mass media – 'there is a dulling of the real debate, an avoidance of genuine dissenting issues [...] this lamination of public opinion and taste' (Guattari 2014, p. 433). The entry into the post-media era is determined by the evolution of technology, more precisely, by the miniaturisation and personalisation of machines and technical devices, which would lead, according to Guattari, to what many scholars have identified as a premonition of the internet: 'the junction between the audiovisual screen, telematics and computing' (Guattari 2014, p. 136). According to Guattari, the reappropriation of information and communication technologies would trigger processes of subjectivation since these means freely available expression would give rise to an infinite multiplicity of desires, a 'strengthening of the heterogeneity and singularity of its composers' (Guattari 1992, p. 16).

Considering the thought-provoking aspects of Guattari's theory for our reflection on cinema, he notes that 'the entry into multiple data and image banks leads to a reappropriation and a re-engineering of programmes' (Guattari 2014, p. 434) and the 'aesthetic regain of image production, of audiovisual production' (Guattari 2014, p. 454). However, he also warns of another contrary tendency linked to technological development, a tendency towards homogenisation, towards the reductionist universalisation and the serialisation of subjectivity – 'in the same movement, new technologies secrete efficiency and madness' (Guattari 1990, p. 43). Guattari's identification of this dichotomy is very accurate, even regarding new media today, when this tension between the

emancipatory and sovereign potential and the alienating nature of new media as surveillance and data mining is still largely operative. But Guattari remained confident, stating with a transhumanist perspective that 'there is nothing to prevent, rather than the subject coming under the control of the machine, that it is the machinic networks that engage in a kind of process of subjectivation; in other words, that the machine and humanity one day begin to maintain fruitful symbiotic relations' (Guattari 2008, p. 131).

In the time since Guattari wrote, our contemporary socio-technological condition, our relation to machines and communication technologies and the possibility to reappropriate audiovisual media has undergone a profound change. In 2005 to be exact, 'the year that broadband DSL connections became widely available and, perhaps most importantly, the year that the first video hosting service was founded: YouTube' (Ruschmeyer 2012, p. 35). Indeed, the birth of YouTube was directly determined by very specific technical advances – the growth of broadband, the cheapening of webcams, small digital cameras and personal computers – and was significant because it represented a democratisation of audiovisual image production and the first (an)archive of User-Generated video – which has been called an 'accidental archive' (Burgess/Green 2009, p. 87). YouTube was the first bank of vernacular video, an explosion of audiovisual production coming from the people, a people who turned into 'a people of video-objects, […] a video-people' (Ries 2018, p. 23). YouTube represented at the time what we will suggest naming the definitive merging of the web's *common images*. The vernacular video of YouTube – which has since emerged in many other online video hosting, live-streaming platforms and mobile apps – was born alongside a new post-media figure already well identified in media and communication studies, the prosumer, a kind of new active and creative virtual citizen who produces online content and consumes it in turn. If 'in our daily lives, we come into contact with fictions, representations and forms that nourish a collective imagination whose contents are dictated by power' (Bourriaud 2004, p. 92), prosumers propose imaginations and representations that diverge from those of professionals and mass media. This has been evidenced especially in terms of social struggle, digital activism and citizen journalism's dimension, but also in terms of representations of intimacy and daily life, spheres to which the mass media do not have access. In this quarrel of representations, these new ways of seeing, these new images have opened up possibilities for citizen participation in the collective public imagination, the creation of new relationships between individuals and the access for each individual to the production of knowledge and discourses shaping our world.

Still, the prosumer is just another one of the algorithmic victims of our era: far from being a free, sovereign and autonomous individual as Guattari announced or expected, his media consumption decisions, as well as the visibility of his self-produced content, are guided by the algorithmic governmentality of the virtual media ecosystem. Moreover, all our activity on the internet forms part of what has come to be called digital labor (Cardon/Casilli, 2015), i. e. free and invisible forms of work carried out by internet users who directly produce, through data mining or algorithmic machine learning methods,

wealth and value for web platforms and companies. The figure of the prosumer is therefore an ambivalent one, who, despite having adopted an active attitude and reappropriated media production, most of the time has not achieved greater autonomy, and is not even likely to seek it in general terms. The hopes that Guattari harbored thirty years ago have therefore led, over time, to the realisation of their partial failure, probably because he might have been too optimistic, as enthusiastic as he was in his political convictions and engagement. Although it has made possible new modes of organisation, creation, cooperation and militancy for civil society, the virtual space of the internet has not transformed into a deterritorialised rhizomatic land that will bring us out of the impasse of the civilizational crisis because 'most of the media infrastructure we are using is in the hands of a few companies, thus re-establishing the old model of mass media domination […] the decentralisation of the means of production was accompanied by a centralisation of the relations of production' (Apprich 2013, p. 136).

From another perspective, if *The Three Ecologies* (1989) proposed a 'new profile of citizen, artist' (Querrien 2012, p. 28), today's participatory culture shows that not all creators of online content are emancipated, creative and reflective artists, nor do they enjoy post-media subjectivities. Also, despite the fact that vernacular video 'challenges the division between high and low art, which has formed the foundation of the art system for centuries' (Ruschmeyer 2012, p. 38), it is neither considered art by the institutional world of contemporary art nor, most of the time, by its own authors, whose objectives and motivations, being based in economic, relational or political ones, are quite different from those in the art world. In this sense, the prosumer and the artist are two figures who, although they may occasionally coincide, do not always do so. These tensions linking them must then be addressed and studied, especially with regard to the processes of production of subjectivity and resingularisation through the virtual sphere, as Laurence Allard does, for instance, when writing about mobile phones as 'inner voice media' and 'technologies of the self' allowing an 'expressivist individuation' (Allard 2017, pp. 29–39).

Guattari considered art as off-centre, as a rupture of meanings, a reinvention of the subject and capable of generating fields of possibilities. If 'post-media practice is characterized […] by a critical attitude towards the media in use' (Broekmann 2014), I believe that nowadays it is, in part, in certain post-internet[2] artworks where we can identify post-media practices endowed with a critical look at the virtual media ecosystem and our participatory culture, capable of performing a 'function of meaning' (Guattari 2014, p. 66). In some way, these creative singularities would show the way to remedy, to compensate for the partial failure of the aspirations of the Guattarian post-media era in the long run. Far from pretending that only through art will the sovereignty of the multitude, or the 'becoming-Prince of the multitude' (Hardt/Negri 2009, p. viii),

2 Post-internet in the sense used by Grégory Chatonsky, which refers to artistic practices showing a critical and reflective attitude towards the information age and the internet as opposed to net.art: http://chatonsky.net/post-internet-definition/

be achieved, I am interested here in identifying where post-media subjectivities exist in contemporary video and film production. I argue that some recent non-fiction video and cinematographic artworks based on the recycling and editing of vernacular videos found in social networks, video hosting and livestreaming platforms – such as *Going South* (2018) by Dominic Gagnon, *Testament* (2009–2017) by Natalie Bookchin, *Roman National* (2018) by Grégoire Beil, *The Pain of Others* (2018) by Penny Lane or *Present. Perfect.* (2019) by Shengze Zhu – represent examples of these post-media subjectivities and practices. The work of these post-media video artists and filmmakers has value insofar as it 'acknowledges the advent of the information society' (Quaranta 2013, p. 212) and the participatory turn, contrary to a very large part of contemporary artistic creation that turns its back on our post-internet socio-technological condition in an exercise of anachronistic and apolitical artistic solipsism, an 'art that retreats to positions typical of the industrial era we are moving out of' (Quaranta 2013, p. 212).

2 Media warming and the videosphere

Before continuing our reflection, it is necessary to clarify what I mean by common images. Negri and Hardt's key book *Commonwealth* (2009) defined common as 'the common wealth of the material world-the air, the water, the fruits of the soil, and all nature's bounty [...] the inheritance of humanity as a whole, to be shared together' (Hardt/Negri 2009, p. viii). But the common, according to the authors, is not limited only to material resources, it also designates some intangible goods, results of social production, necessary for interaction, 'such as knowledges, languages, codes, information, affects, and so forth' (Hardt/Negri 2009, p. viii). In our globalised world, according to the authors, the production, conservation and distribution of these goods are crucial. I claim that virtual images and representations, both those produced by the mass media and the vernacular ones produced by prosumers, are part of this common wealth – common resources, digital commons, but also living, dynamic and social entities. Therefore, I argue that the need to manage these common images, expanding our capacities for collective production and self-government, is one of the crucial political and media problems of our time. The word "common" here refers not only to the fact that these images are goods to be shared, but also to the fact that in our post-media era most images are produced by *common people*. Besides, the idea of common images is part of a copy-paste and remix culture and a copyleft, Creative Commons ethics opposing the privatisation of representations and culture.[3]

Nowadays, despite – or due to – the visual saturation of our media ecosystems, that I will call, with Dominique Boullier (2019), media warming, as a result of 'the

3 See: Lawrence Lessig: *Free Culture, The Nature and Future of Creativity.* New York, Penguin Press, 2004 and Lawrence Lessig: *Remix. Making Art and Commerce Thrive in the Hybrid Economy.* New York, Penguin Press, 2008.

ecological devastations in the social and mental domain' (Guattari 2014, p. 44), there is a paradoxical lack of imagination, a scarcity of imaginative skills, a crisis of representation. As Guattari wrote, 'it has become imperative to confront the effects of Integrated World Capitalism in the field of *mental ecology* within individual, domestic, conjugal, neighbourhood, creative and personal ethics daily life' (Guattari 1989, p. 44). Subjects find themselves immersed in connected environments, wrapped in clouds of data and signs: the concept of ecology thus describes well our contemporary techno-media condition. We are situated within the symbolic structures of the media, they have existential functions modelling our unconscious, our identities and subjectivities. The media *are* our environment, they condition our perceptions, thoughts and actions. The media have partly replaced the feeling of a link between subjects, the production and exchange of images being today one of the main modes of communication between individuals, one of the main activities producing social bonds. Considering the videosphere – the set of moving images which swarm and inhabit the digital networks and screens of the planet – as an environment in which subjectivities are produced, transformed and renovated leads us to understand the need for a visual ecology. This ecology, based on a constant, horizontal and democratised sharing, recycling and reusing of common images, governs the ethics and the politics of post-media video art and cinema. As the media activists collective Adilkno wrote in the nineties, 'the environment is more than endangered plants and animals. It is a mentality which, with abstract concepts like 'conservation' and 'recycling', sees the constructed media sphere as a third or fourth *nature*. Watchfulness prevails against all possible needless pollution and senseless waste' (Adilkno 2013. p. 63).

This same idea is found in Guattari's ecosophy – the broader philosophical framework within which the notion of post-media was born – which relates and connects environmental ecology with economic, urban, social and mental ecologies. It is about understanding that our being in the world is part of a network, that we are connected to other beings, human and non-human, animal, vegetable, mineral, as well as to 'intangible species such as music, the arts, cinema, the relationship to time, love and compassion for others, the feeling of fusion within the cosmos' (Guattari 2014, p. 60), within symbolic, media, economic and cultural superstructures. For Guattari, 'the ecological crisis refers to a more general crisis of social, political and existential nature' (Guattari 2014, p. 60). Ecosophy was intended to encompass everything from the most intimate and everyday levels to planetary geopolitics in order to refund the world and make it more habitable. This holistic vision of the interconnections and interdependencies that order our world and its ecosystems echoes the idea of the common already mentioned, since the Guattarian 'intangible species' are also commonwealth, *res publica*, common goods among which are the common images of the overheated videosphere, and of course, any artistic creation. Thus, 'each work produced [can] be inserted into a social network that will either appropriate or reject it' (Guattari 2014, p. 66).

In this historical context marked by a media warming never before experienced by humanity, and adopting an ecosophical perspective, the questions about which images

to preserve, which images to look at, which images to show, become existential questions, undoubtedly philosophical and political. When the videosphere is contaminated by an infinite amount of digital garbage, the curatorial function[4] of cinema and post-media art, in terms of its critical and reflective role, imposes itself on the Foucauldian author function. This curatorial function consists of fully assuming the role of prescriber (of meaning and value), collector and archivist – which means being, first of all, a spectator. As I have already written elsewhere (Hernández López 2020), this role is essential in revealing the aesthetic, political and affective potential of common images.

3 The artist as ecologist

The question of what to do with the vernacular audiovisual heritage, with the common images of the internet, was one of the questions addressed by the first theoretical texts on the web video. Green and Burgess already wrote in 2009 about the precariousness, disorder, heterogeneity and instability of YouTube as a cultural archive, which they called 'accidental archive': 'who is going to archive the archive? And what is going to be preserved? …] should decisions about what to preserve be subject to the traditional criteria of cultural and historical 'significance,' or does the idea of YouTube as a 'bottom-up' cultural archive demand we question the ideological underpinnings of top-down thinking around cultural heritage?' (Burgess/Green 2009, p. 89) Some filmmakers and video artists have answered Green and Burgess' question through the curatorial function of their works.

The films of the Canadian Dominique Gagnon are only composed of YouTube videos. In *RIP in Pieces America* (2008) he traced images of white North American conspiracy or survivalist men preparing for the end of the world. In *Going South* (2018), the montage of heterogeneous videos tries to construct his personal visual idea of the South on the internet. Gagnon's documentary practice has been baptised by himself, calling it, instead of found footage, 'saved footage', as he considers his task to be that of saving documents from the accidental and unstable YouTube archive for preservation and conservation over time. In *Roman National* (2018), Grégoire Beil edited fragments of video chats of young French people that he found through the Periscope live application during a summer in order to create a portrait of contemporary French youth online. Using a similar *dispositif,* director Shengze Zhu made a documentary using screen recordings from Chinese live video platforms where isolated netizens tried to alleviate their loneliness through online interaction. American artist Natalie Bookchin edited YouTube video diaries in her video installation *Testament* (2009–2017), aiming to do a collective visual exploration of online expressions of the self about intimate questions such as

4 We borrow the concept of 'curatorial function' from Simon Ruschmeyer, even though he uses it with a broader meaning.

sexual orientation or mental illness and medication. In *The Pain of Others* (2018), filmmaker Penny Lane documents a skin disease through the eyes and YouTube videos of three women suffering from it. These are some examples of these new post-media artistic and cinematographic practices that exercise the curatorial function of the video sphere already mentioned – and post-media subjectivities are, fortunately, increasingly common in contemporary creation landscape. These artists and filmmakers understand their role within the ecology of post-media images: pointing out, selecting, exhuming. In a way, their work corresponds to the ecologist upcycling: creative reuse of digital content forgotten, buried, made invisible by algorithms within the virtual ecosystem, trivialised by the incessant flow of networks. They move 'from passivity towards the available stock of signs to accountability practices' (Bourriaud 2004, p. 90).

In the infinite ocean of the videosphere, inhabited by all sorts of potentialities, are in fact contained an infinite number of films and artworks in a virtual state, still to come. If in the previous era avant-garde art (situationists, pop art, among others) practiced appropriation and *détournement* of the contents of the dominant and hegemonic mass media, in the post-media era, avant-garde art appropriates post-media, vernacular contents, 'to produce works starting from secondary materials, which exist not as isolated objects but nodes in a network of meanings' (Quaranta 2013, p. 203). By the 'retrograde remediation'[5] of the videos, these artists hijack the editorial strategies and the algorithmic governmentality of the web, which order the results of the searches, determine the visibility of contents and guide the economy of attention of users. A way, among others, to subvert algorithmic automation, to deprogram the program. But above all, as the videos are repurposed, forms are reactivated, images are singularised, so the aesthetic regime changes, revealing hidden values or creating and injecting new value to the images, producing meaning through the dialectics of montage. These artistic tactics of rearranging technologies, capable of endowing them with new functionalities, contribute to the development of a critique of the ubiquitous digital that can help us understanding the risks of technological subjugation.

Furthermore, taking these videos outside of the virtual flux means breaking with the conditions they usually work within. Editing is a 'machine of subjectivation' allowing to reorient the videos towards the production of individual and collective subjectivity, generating an added value of subjectivity. A non-egocentric subjectivity, a kind of impersonal intersubjectivity that expresses itself in the artwork through many heterogeneous voices, a collective elaboration that metamorphoses and goes beyond the individual approach, against the over-individualisation of art, against the 'obsession of the new created by this vision of historicist art and centred on the West' (Bourriaud 2004, p. 89). Because capitalist ideology attaches the greatest importance to the person of the author, but 'culture is an infinite palimpsest' (Bourriaud 2004, p. 86) and any text is 'a fabric of quotations' (Barthes 1984, p. 65), the central question in these post-media

5 Bolter and Grusin (1999) called 'retrograde remediation' the gesture of moving contents and forms from one more modern media to an older one.

works is that of the position of the artist vis-à-vis the people filming the appropriated images. This problem is related to the bond of subordination constituting the subaltern condition, echoing the famous interrogation by Gayatri Spivak (1988) – can the subaltern speak? – as well as the correlated issue pointed out by Linda Martin Alcoff concerning the problem of speaking for or about others from a privileged location, which she defined as a *problem of representation*, a problem in which context and content have equal significance. The 'dangers of speaking across differences of race, culture, sexuality, and power' are here at stake, a gesture which might 'increase or reinforce the oppression of the group spoken for' (Alcoff 1991, p. 3). The answer has to do with a matter of proximity and distance – geographical, social, cultural, economic, ideological, epistemic, etc – between the artist and the authors of the images, and of transparency and opacity – that is to say, of the aesthetic and discursive modalities in which the voices and meanings in the artwork are intertwined, silenced, modified or amplified –, both criteria being negotiated differently in each artwork. In this regard, photographer Joan Fontcuberta proposes replacing the term appropriation by *adoption* when referring to what he calls post-photography. If the first concept refers to a private gesture, the second is a public declaration equivalent to 'publicly recognising a symbolic value' (Fontcuberta 2016, p. 60) in the image. There is no dispossession in adoption, but only an (s)election. The artist claims the 'ideological tutelage' (Fontcuberta 2016, p. 60) of the image, but also recognises and acknowledge the voices speaking in them, through them. Common images are indeed inappropriable but *adoptable*.

I have tried to show how the reformulation and critical re-elaboration of virtual participative culture within a post-media regime is partially ensured by these artists in whose works collective assemblages of enunciation are built through the reappropriation of technologies. But there are still crucial questions to be answered, such as what can we learn from these post-media subjectivities in order to apply these lessons beyond the privileged, elitist world of contemporary art and cinema. Furthermore, it is worth recalling, once again, that contemporary post-media subjectivities also develop in other centers of existence within our digital capitalism, for example, within media activism[6] or hacker culture.

Bibliography

Adilkno: Theory of the Sovereign Media. In: Clemens Apprich / Josephine Berry Slater / Anthony Iles / Oliver Lerone Schultz (Eds.): *Provocative Alloys: A Post-Media Anthology*. London/Lüneburg 2013

Linda Martin Alcoff: The Problem of Speaking for Others. *Cultural Critique*, 20, 1991, pp. 5–32.

Laurence Allard: Partages créatifs: stylisation de soi et appsperimentation artistique. *Communication & langages*, vol. 194, no. 4, 2017, pp. 29–39.

6 See, among many others books on the topic: Victor Pickard and Guobin Yan: *Media activism in the Digital Age*. London, Routledge, 2017.

Clemens Apprich: Remaking Media Practices: From Tactical Media to Post-Media. In Clemens Apprich / Josephine Berry Slater / Anthony Iles / Oliver Lerone Schultz (Eds.): *Provocative Alloys. A Post-Media Anthology.* London/Lüneburg 2013.

Roland Barthes: La mort de l'auteur. In *Le Bruissement de la Langue,* Paris 1984.

Jay David Bolter / Richard Grusin: *Remediation. Understanding New Media*. Cambridge 1999.

Dominique Boullier: Lutter contre le Réchauffement Médiatique. internetactu.net URL: http://www.internetactu.net/2019/02/05/lutter-contre-le-rechauffement-mediatique/

Nicolas Bourriaud: *Post-production. La Culture comme Scénario. Comment l'Art Reprogramme le Monde Contemporain*. Dijon 2004.

Andreas Broeckmann: Post-media Discourses. A Working Paper. URL: http://www.mikro.in-berlin.de/wiki/tiki-index.php?page=Postmedia+Discourses

Jean Burgess / Joshua Green: *YouTube. Online Video and Participatory Culture*. Cambridge 2009.

Dominique Cardon / Antonio Casilli: *Qu'est-ce que le Digital Labor.* Paris 2015.

Joan Fontcuberta: *La Furia de las Imágenes. Notas sobre la Postfotografía*. Barcelona 2016.

Félix Guattari: Du Postmoderne au Post-média. *Multitudes*, 2008/3 n° 34, pp.128–133.

Félix Guattari: La Production de Subjectivité. In *Chaosmose*. Paris 1992.

Félix Guattari: *Les Trois Écologies*. Paris 1989.

Félix Guattari*: Qu'est-ce que l'*Écosophie. Paris 2014.

Félix Guattari: Vers une Ère Post-média. *Terminal*, n° 51, October-November 1990.

Michael Hard and Antonio Negri: *Commonwealth.* Cambridge, Massachusetts 2009.

Gala Hernández López: Du Genre Vernaculaire comme Genre Cinématographique. In: *Interfaces,* 42, 2020, pp. 125–144.

Domenico Quaranta: *Beyond New Media Art*, LINK Editions, Brescia 2013.

Anne Querrien: Une Lecture des Trois Écologies. In: *Chimères*, 2012 (1/76), pp. 25–28.

Marc Ries: Gestes Insolites. Notes sur une Forme Vidéo Connectée. In: Claire Chatelet / Amanda Rueda / Julie Savelli (Eds.): *Formes Audiovisuelles Connectées*. Provence 2018.

Simon Ruschmeyer: Shifting Paradigms in Web Video: from Access to Curation. In Ágnes Pethö (Ed.): *Film in the Post-Media Age*. Cambridge 2012.

Gayatri Chakravorty Spivak: Can the Subaltern Speak? In Cary Nelson; Lawrence Grossberg (eds.): *Marxism and the Interpretation of Culture*. Basingstoke 1988, pp. 271–313.

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Post-Media, Virality, and Desire

Untimely Meditation

Writing a paper on the notion of *post-media* at the time of the COVID-19 pandemic, when unprecedented global lockdown measures are forcing a significant part of working activities and an even wider part of social activities to take through a personal screen, I have to wonder: what is the *timing* of our *meditations* in regard to our current condition? While the notion of *post-media* itself looks perfectly *on time* for describing and interpreting our current condition, Guattari's peculiar meaning of this very notion might now look curiously *out of season*. *Out of season* as Nietzsche's *thoughts* aimed at being?[1] Or, out of seasons like the clothes of the writer who left his apartment in Lyon mid-February 2020 with luggage for a week and got stuck in Northern Italy until mid-May 2020 (so far) while writing these pages? In other words, is Guattari's post-media simply an old and by now unfashionable notion compared to the current understanding of post-media that perfectly reflects our time? Or can its distance from our present be understood in a critical and therefore more fruitful way?

Guattari's Post-media: an ethico-aesthetic paradigm

Before meditating on the COVID-19 pandemic and our current 'post-media condition', I will try to pinpoint what I believe to be some of the most crucial elements of Guattari's notion of post-media, giving shape to a philosophical constellation within his line of thinking.

For Guattari, post-media is an age when the conditions of possibility for "new practices of subjectification" emerges. Following "the hegemony of mass-media powers", which produce processes of alienated and desingularised subjectification, the post-media condition should instead facilitate "a concerted reappropriation of communication and information technologies" (Guattari 2008, p. 133) leading to new forms of singularities. The notion of singularity is crucial to understanding post-media for Guattari.

1 See the different titles of English translations of Friedrich Nietzsche, *Unzeitgemäßen Betrachtungen*. 1873–1876, translated by Anthony M. Ludovici, *Thoughts Out Of Season* (1909); translated by Richard T. Grey, *Unfashionable Observations* (1995).

Deleuze and Guattari already recurred to this notion in the *Anti-*Œdipus (1983)[2], to name a processual phase of the machinic unconscious. It is important to specify that when they speak of *singularities*, they mean a pre-personal and pre-individual condition, a metastable and molecular formation expressing a unique *difference* instead of an *identity*. A singularity is not a *subject*, nor an individual: it is the metastable result of a process of subjectification or individuation that is not separable from the process itself. We can find a meaningful definition of singularities in Deleuze's *The Logic of Sense*, where it is framed in opposition to 'consciousness' or the organic individual: "What is neither individual nor personal are, on the contrary, emissions of singularities insofar as they occur on an unconscious surface" (Deleuze 1990, pp. 102–3).

Singularities are pre-individual performative events from which subjectivities can originate in metastable forms. When Guattari talks about *subjectification*, he is not talking about the formation of stable identities but rather about processual forms of singular – yet potentially collective – performative events, introducing a difference, both original and residual, in the plane of immanence. While the lexical choice of *subjectification* could be ambiguous since it keeps referring to a *subject*, which is the traditional philosophical term for naming a stable and enclosed identity, Guattari makes clear that he is rather referring to *minor identities*, processual subjectification processes, when he claims that "the upcoming post-media revolution should be called upon to take over (with unparalleled efficiency) from minority groups" (Guattari 2008, p. 133). As we've learned from *Kafka. Toward a minor literature* (Deleuze/Guattari 1986), minority groups are not simply politically *minor*, they are rather a model for an alternative – metastable and singular – idea of subjectification. In other words, *minor identity* is not only a political reality but also an ontological element: singularities are sparks for minor identities.

Singularities are events on a field of immanence: despite their being singular, they're inseparable from the environments in which they happen and become and inseparable from the processes that produce them. That is why post-media has to be understood as an ecological question: "An essential programmatic point for social ecology will be to encourage capitalist societies to make the transition from the mass-media era to a *post-media age*, in which the media will be reappropriated by a multitude of subject-groups capable of directing its resingularisation." (Guattari 2000, p. 61)

Post-media is then a theoretical notion that allows us to think of sociality in ecological terms as well as a practical notion that should enable the realisation of a social (sustainable) ecology. What's an ecological thought for Guattari? I would suggest we are dealing with an ambiguous notion that designates both an ethical tool and an epistemological approach. We can find such an ambiguity (meaning duality) in his advocacy for an *ecosophy*:

2 See especially Chapter IV, "Introduction to schizo-analysis", Paragraph 5, "The second positive task", p. 340–382.

> Without a change in mentalities, without entering a post-media era, there will be sustainability for the environment. But without changing the material and social environment, there will be no change in mentalities. Here we find ourselves in a circle that leads me to postulate the need to find an 'ecosophy' articulating environmental ecology with social ecology and mental ecology. *(Guattari 2000, p. 64)*

Ecology is then the hope, the wish and the effort towards a sustainable environment, which is inseparable from a sustainable sociality and psychological activity; that is to say, an ethical, voluntarist practice. But ecology is also an epistemological approach: this mutual and *ecological* articulation of environment, sociality, and 'mind' (to be understood as an extended mind, including unconscious activity), is the *circle* of *ecosophy*. The epistemological approach is accounting for materiality and mind, nature and society, not as different parts of the structure but as interacting on a molecular level, in the same field of immanence. This duality of Guattari's *ecology* is then a second fundamental element to understanding the deeper meaning of his conception of *post-media*.

A third element found in both passages previously quoted is the attention to technology, especially information and communication technologies, in their materiality. Machines, and their components, take part in Guattari's ecology as much as environment (nature) and subjectification (psyche/mind/unconscious): on a molecular level there is no separation between them. On the contrary, technology is often the key to understanding the actual molecular functioning, as we can see in the *Anti*-Œdipus, where nature and unconscious are both explained in machinic terms. Deleuze and Guattari could not be clearer, machines are not metaphors (Deleuze/Guattari 1983, p. 2, p. 30). If industrial machines were the model for the molecular functioning of the unconscious in the *Anti*-Œdipus, information and communication machines would come to replace them. As Guattari wrote in *Chaosmosis: An Ethico-Aesthetic Paradigm*, "[T]echnological machines of information and communication operate at the heart of human subjectivity, not only within its memory and intelligence, but within its sensibility, affects and unconscious fantasms" (Guattari 1995, p. 4). Information and communication machines are then the model to describe the molecular processes of the unconscious as well as of the environment. Technology, especially information and communication technology, is essential to define but also to realise the post-media condition, made possible by technological features such as "the miniaturization and customization of equipment, a resingularisation of mediatic means of expression" (Guattari 2008, p. 133), as Guattari wrote, anticipating one of the main trends in current technological devices. This brings us to another essential element of post-media for Guattari's: time.

Post-media is an *age*, a historical condition. But it is not *simply* an age or historical condition: other factors are needed to enter post-media. It is a condition situated in history, although not determined by history itself. However, given its ontological and ecological nature, it is important to highlight the historicity of such a notion. This historicity was explicitly pointed out by Guattari himself, as we could see above. In this regard, it is interesting to observe how the first occurrence of post-media *chez* Guattari can be

found in a paper arguing against the *post-modern condition* (or rather, despite Guattari's intentions, *post-modernisms*). Post-media is conceived, by Guattari, as an alternative to *post-modern* – estimated as a too vague and linguistic-centred notion – for describing post-industrial capitalism and global society. The two main differences with post-modernism, as understood by Guattari (often, I have to say, quite freely in regards at least to Lyotard's meaning of *postmodern*), are:

- post-media does not rely on a linguistic system of reference to an external signifier, that is to say that Guattari's polemic against post-modernism is an updated version of his polemic against structuralism and psychoanalysis[3];
- post-media does not simply state the failure of meta-narratives, implicitly accepting capitalistic *status quo*: post-media wishes to transform this very *status quo* by taking the opportunities opened through technological, economical and societal transformations.

That is why we can say that post-media for Guattari is a historical condition that works also *against* its time.

Post-media is then a constellation of multiple elements that we tried to pinpoint in the first part of this paper: singularities (process of subjectification), ecology (in both ethical and epistemological meanings), technology, and temporality (historical but also critical towards its time). Within the frame of Guattari's work, I believe *desire* could be seen as the absent centre of this constellation: desire is at the core of the process of subjectivation, libidinal energy activating "disjunctive synthesis of singularities and chains" (Deleuze/Guattari 1983, p. 338). The micro-politics of desire is not only in sync with ecological praxis but also not in contradiction with large scale ecology struggles (Guattari 2000, p. 51), as information and communication technology operates at the heart of human "sensibility, affects, and unconscious fantasms"; that is to say, in one psycho/schizo analytical word, *desire*. Furthermore, as Erich Hörl points out, "Guattari thought a technico-medial historicity of the unconscious and of desire" (Hörl 2014, p. 5), which places desire in relation to history and temporality.

I therefore suggest approaching the notion of post-media in Guattari from a libidinal point of view, highlighting the importance of desire for all the elements that contribute to shaping the post-media condition itself. Such an approach allows us to extend the duplicity of desire to post-media: the *aesthetic and ethic* duality, characterizing Guattari's later thought more generally.[4] Aesthetics designates the conditions of possibilities of our libidinal experience, and ethics designates its orientations. If aesthetically speaking we can talk in terms of a "technico-medial historicity of desire", desire is ethically speaking a choice, a way of being within such a context. Such an ethical dimension is already highlighted by Foucault in the *Preface* to the American edition of *The Anti-*Œdipus: "I

3 This is, for instance, the proposal of Guattari (2008), the first text in which we can find an occurrence of post-media's term in Guattari's work.

4 Such a double dimension is already highlighted in the subtitle of Felix Guattari, *Chaosmosis. An ethico-aesthetic paradigm* (1992)

would say that Anti-Oedipus (may its authors forgive me) is a book of ethics, the first book of ethics to be written in France in quite a long time (perhaps that explains why its success was not limited to a 'readership': being anti-oedipal has become a life style, a way of thinking and living)"(Foucault in: Deleuze/Guattari 1985, p. xiii). Approaching post-media through desire gives us a key to perceive and interpret such a duality operating at the core of post-media itself. If on the one hand, aesthetically speaking, post-media is a technico-medial historical condition, and on the other, ethically speaking "a life style, a way of thinking and living", a choice that can be possible within (and thanks to) such conditions of possibility, I believe the aesthetics/ethics duality of the notion of post-media is a fundamental aspect to understand its complexity, especially in regards of its relation to our time. In other words, such an aesthetical/ethical duality is fundamental for characterising how Guattari's notion of post-media could be both *on time* and *unfashionable*, *untimely*, or *out of season* in regard to our present pandemic condition.

Untimely meditations on post-media virality

It is too soon to study or even to share meditations on transformations of human and non-human (ecological and medial) conditions produced by a major event such as the coronavirus pandemic. I believe, however, that such an event offers us at least the possibility, as well as the necessary distance, for reflecting on our condition *before* the epidemic. As it is accelerating and catalysing a whole series of processes that were already transforming our societies; it is making them manifest.

Therefore, the hypothesis I will put forward through the untimely meditations composing the second part of this paper is that the COVID-19 pandemic has been both the climax of the post-media condition as we have known it so far, as well as a moment of its self-consciousness.

Thus, the observations I collect and develop here aim at being *untimely* in regard to our present condition: untimely because of such a distance, a temporal but also spatial distance introduced by the lockdown, which could also function as *critical distance*. But untimely also on a historical level: if there is anything we can say it will more probably be about our previous situations rather than about our foreseeable future. The *untimely* relations of such mediations in respect of our times will allow us to better understand the *untimely* relation of Guattari's *post-media* in respect of current understanding of it.

Meditation #1 –On Post-coronial studies

In a commentary on Žižek's latest book, *Virus*, and more generally on the current pandemic, Maurizio Ferraris claims that this coronavirus risks becoming a paradigm through which the "whole reality" is interpreted, giving birth to what he names

(ironically but efficiently) *post-coronial studies* (Ferraris 2020). This might be especially true for media studies. In *We'll show you (who we are)*, a reflection on our relations with screens in light of the current pandemic, Mauro Carbone cautiously suggests how it might be presumptuous to affirm that, after this event, "nothing will be the same as before". However, he puts forward "the hypothesis – and the hope – that at least with respect to our relations to the screens, quite an amount of things will not get back to the way they were" (Carbone 2020).

For sure, coronavirus changed our media paradigm, but mainly by accelerating some processes that were already ongoing. More than our media condition itself, it changed our perception of it, "our relations" with it and our awareness (and unawareness) of it by increasing our acceptance of some practices (for instance online instead of physical presence) as well as our nostalgia for others that seem inevitably meant to fade away (for instance going to cinema, theatres or live music).

Meditation #2: Anthropocene and Radical Mediation

In her paper *Post-Media Virality: When We Are the Medium (of the Virus)*, Angela Maiello (2020) claims that the current COVID-19 pandemic highlights something that certain media scholars have been stating for a long time: mediation is not only about communication, rather it is a process that takes place on an existential level and takes both human and non-human *modes of existence*[5] into account by overlapping biological and technological dimensions. In such a frame, the transmission of the virus must be thought of as part of a process of mediation, in which we are the medium of the virus both as that which transports it and the environment that hosts it. We could argue then that the COVID-19 pandemic has made manifest what Richard Grusin named "radical mediation", as a paradigm of relational ontology for which "all activity is mediation, and [...] there is no discontinuity between human and non-human agency, or semiosis" (Grusin 2015, p. 140). *Post-media virality* would then be a particularly explicit manifestation of the *radical mediation* paradigm itself. Furthermore, it is such an ontology that helps us in understanding our era as the Anthropocene, where mutual constitutive relations between technological and natural elements, human and non-human agencies, contribute towards shaping and redefining the environment we inhabit (Grusin 2018).

In the aforementioned paper, Ferraris argues that such a wide and wild spread of the virus, heedless of human levels of civilisation, as well as the consequences of the lockdown on the natural environment (cleaner waters and air, and animals wandering around our towns), reveals the presumption of a concept such as the Anthropocene. I disagree with Ferraris on this as what he is referring to as "the Anthropocene" turns out to be a rather simplistic, anthropocentric and therefore *presumptuous* comprehension of this notion, which does not account for the ecological and mutual relations between

5 Here I'm referring to the title of Gilbert Simondon, *On the Mode of Existence of Technical Objects* (2017).

human beings and other "beings" (geological, biological, technological, economical) that for Grusin, among others, define the Anthropocene itself. I believe instead those very same facts Ferraris recounts prove the impossibility of separating human beings from the intricated texture of mediations constituting the world, the flesh of the world (*la chair du monde*)[6], in which existence is happening and becoming. They prove, in other words, the necessity of a relational and ecological ontology to study the condition of possibilities of our existences, where 'our existences' include the modes of existence of human beings as well as of planet Earth, virus, or Artificial Intelligence.

If the actual challenge of thinking of the Anthropocene, as Dipesh Chakrabarty (2018) points out, is to be able to think in a geological time, to think within the temporality of rocks, and not only within the temporality of human history, then what the post-media virality characterising our condition demands is to be thought within the temporality of a virus. More than this, it also has to be thought of within the multiple temporalities of current information and communication technologies whose function has been radically amplified by social distancing and lockdown. However, thinking within their temporalities, as implicitly suggested by Chakrabarty, might not be enough. Taking Guattari's libidinal approach to ecology, I believe the challenge of such a radical notion of Anthropocene – and of radical mediation more generally – is to think within geological, viral and technological desires. How does Earth desire? How does the virus? And how do the screens of our devices, or algorithms? It is only by the combination of their sensorium, their temporality, and their libidinal activities that we can take into account their modes of existence.

Meditation #1+2: Mediation as Self-consciousness

The emergency related to the COVID-19 pandemic is then catalysing in the present a series of processes that began a long time ago. Longtime can identify a wide-ranging spectrum of temporalities: longtime as digital revolution, longtime as post-media, longtime as post-modern, longtime as capitalism, longtime as the Anthropocene. Such a moment in which the habit is partly suspended and partly enhanced (after all, we have all been locked down in our homes), in which we acknowledge what we were doing before because we cannot do it anymore or discover things that were unconscious before and now become manifest, is a moment in which we confront the Other, the "negative", namely a moment of *self-consciousness*. Self-consciousness: a notion with an unmistakably Hegelian taste (Guattari may forgive me)[7]. Nevertheless, I find the definition of Hegelian *self-consciousness* offered by Judith Butler in *Subjects of Desire* particularly apt for our meditations:

6 See a model of relational ontology in Maurice Merleau-Ponty, *The Visible and The Invisible* (1969).

7 On the critique that Deleuze and Guattari move against Hegel's philosophy of history, see Craig Lundy, *The Necessity and Contingency of Universal History. Deleuze and Guattari contra Hegel* (2016).

> Self-consciousness is not the momentary act of a discrete consciousness attending an opposing and discrete world, but a cognitive experience taking place in a developing sense of time; it is, in turn, able to grasp the temporal life of the object itself. Consciousness could think determinate being, but could not think the process of determination and indetermination the is Life itself; it could not think change. *(Butler 1987, p. 28)*

Self-consciousness, for the Hegel of *The Phenomenology of the Spirit*, is then a moment in which human consciousness can think within the mode of existences of "objects", of "the world": a moment in which human beings can "grasp the temporal life of the object itself", merging with the World. It is a moment that displays sparks of relational ontology at the core of Hegel's early thought, an ontology for which the very notion of desire turns out to be essential: "in desiring some feature of the world, self-consciousness effects the unity with the world that consciousness could only effect theoretically" (Butler 1987, p. 33). In fact, for Hegel, "self-consciousness is Desire in general" (Hegel 1807, §167), to be conceived as "sensuous articulation of a sensuous object which is simultaneously a reflexive pursuit of self-consciousness itself" (Butler 1987, p. 33). In other words, self-consciousness is desire as sensuous reflexivity, and therefore a process of mediation between the "subject" and the world, in its materiality, temporality and sensuousness. As Butler explains:

> The Hegelian subject cannot know itself instantaneously or immediately, but requires mediation to understand its own structure. The permanent irony of the Hegelian subject consists of this: it requires mediation to know itself, and knows itself only as the very structure of mediation. *(Butler 1987, p. 33)*

Thanks to Butler's reading of Hegel, we can understand *self-consciousness* more deeply, as a moment of awareness of mediation, of *radical mediation*, meaning of such a relational ontology.

It is then in such a double – self-reflecting – meaning, that I suggest considering this pandemic event as a moment of *self-consciousness* of the anthropocenic era – on one temporal scale –, as well as a moment of *self-consciousness* of post-media society – on another temporal scale. For this purpose, we could paraphrase what Mauro Carbone observes in regard to screens and our 'screen experiences' during the COVID-19 pandemic, and apply it to our post-media condition in general: "we needed the coronavirus pandemic crash-test, about thirty years after use of the Internet began to spread, to massively realize, in our collective experience, certain potentials implied" (Carbone 2020) *in our post-media condition itself*.

Meditation #3: Post-media Hybridity

What are the essential elements of the post-media condition as they are revealed at the time of the COVID-19 pandemic? Maiello writes that "this outbreak is showing

us that [...] our post-media life is constitutively hybrid", and therefore that reality and its mediation are the same thing. Maiello's understanding of the notion of post-media seems to rely on more recent conceptions than Guattari's, and its fundamental element is *hybridity*: the post-media condition comes with the end of medium specificity[8], in which the digital revolution plays a crucial role (Weibel 2005), especially by defining a new (post)media logic compared to the logic of the old media.[9] Hybridity is a key element of post-media because this notion is essentially *ecological*, environmental: new media are intimately related to space. By being spatially situated, by transmitting fluxes of information and operating constant mediations through environments, by transforming environments themselves, they tend to constitute what Appadurai names *mediascape* (Appadurai 1996). To emphasise the processual and ecological becoming of *mediascapes*, as well as their power of individuation, to institute a process of subjectification within their environment, Francesco Casetti suggests referring at them as *mediascaping* (Casetti 2017, pp. 40–41). In turn, I suggest reading our *post-media condition*, essentially hybrid, in light of such a process of *mediascaping*, accounting for this indifference between reality and its mediation. It is particularly interesting then to point out how the affirmation of hybridity in the process of *mediascaping* comes with the need to resort to such a process in order to contain human hybridity since this latter is a condition that would lead to a resurgence of the virus.

Meditation #4: We are the medium

It is from such a *radical* perspective, based on relational ontology and this media ecology, that I join Maiello in claiming that *we are the medium* and, in this case, also *the medium of the virus*. We are the medium as far as we are inscribed in a mutual process of mediation: we are the medium along with other living and not living beings, and the activity of our mediation is inseparable from its passivity, to paraphrase Merleau-Ponty (2010, see also 1969).

We are a medium of the virus when we spread it with our hands – whose role is fundamental also in our relations with communication technologies –, as well as with our breath – *afflatus*, which more symbolically expresses the *existential* nature of such radical mediation. But we are also the medium when *protecting* ourselves from the virus and its contagion: "cough and sneeze into your elbow", "wash your hands". First and foremost: mediation is not only about spreading or making available (and therefore reachable, visible, etc.) but also protecting, sheltering, concealing and making unavailable (unreachable, invisible). We should not forget this fundamental and ambivalent

8 See Rosalind Krauss, Reinventing the Medium (1999), *A Voyage on the North Sea: Art in the Age of the Post-Medium Condition* (2000) and *Under Blue Cup* (2011); Ruggero Eugeni, *La condizione post-mediale* (2015).

9 See Lev Manovich, Post-Media Aesthetics (2001) and Mark B. N. Hansen *New Philosophy for New Media* (2004), especially Chapter I, "Between Body and Image: On the 'Newness' of New Media Art", pp. 32–46.

function inherent to *mediascapes* and to the process of radical mediation itself: mediation means making available and unavailable at the same time, weaving together visible and invisible, displaying something while concealing or protecting something else. It is not by chance, that screens are the media dispositive of reference of our times: such fundamental ambiguity is essential to screen functioning, as pointed out by Screen Studies.[10]

Furthermore, wearable technologies of all kinds – from relatively simple (such as masks and gloves), to smart digital tracking devices (bracelets, smartphones with specific tracking apps, etc.) – are now becoming more and more explicitly present and essential to our interactions, to our existences in the hybrid (media) environments we inhabit. This coupling between human body and technology is showing how our being a medium is inseparable from the very context of radical mediation, in which there is no separation between human and non-human beings.

Such coupling of the human body with technology also entails a process of individuation or subjectification quite different from the one desired by Guattari. Here, the process of subjectivation is closer to the one described by Foucault as inherent to the notion of *dispositive* and to power relations catalysed by the dispositive itself.[11] Producing a subject means producing an individual 'massified' identity that you can control, address and tell; a subject that is subjected to the dispositive itself, to its power relations. Such a meaning of subjectification becomes particularly evident in times of a pandemic when the possibility of *individuating* (and inasmuch controlling, addressing, protecting, etc.) infected subjects turns out to be not only manifest but also justified by the ongoing emergency.

Both elements pointed out through the present meditation, 1) the statement that "we are the medium" in a passive-active process of radical mediation and in which mediation is both making available and unavailable, and 2) the fact that the process of subjectivation is issued by power relations within such a process of radical mediation, inevitably lead to the question of (medial) participation. Once again, the COVID-19 pandemic made manifest how participation is always *medial participation* – precisely in a perspective of radical mediation. Furthermore, by forcing us to interact manifestly through media devices, the pandemic made clearer that the issue of participation is always related to conditions of possibilities of mediation: their opportunities and their limitations. If digital technologies are promising us, during lockdown more than ever, that we can participate through them in a series of activities and events (school, work, concerts, diner, drinks with friends, political manifestation), and insofar also *be part of something*, we shouldn't forget that "[p]romises of participation limit the possibilities of partaking and determine the criteria of inclusion and exclusion; they act as demands

10 See at least Jacopo Bodini, Mauro Carbone, *Voir selon les écrans, penser selon les écrans* (2016); Mauro Carbone, Anna Caterina Dalmasso, Jacopo Bodini, *Vivre par(mi) les écrans* (2016); Dominique Chateau, José Moure (éds.), *Screens. From Materiality to Spectatorship. A Historical and Theoretical Reassessement* (2016); Mauro Carbone, *Philosophy-Screens. From Cinema to the Digital Screens* (2019).

11 See at least Michel Foucault, *The History of Sexuality. The Will to Knowledge* (1976).

and impositions for potential participants" (see Bippus/Ochsner/Otto 2016, p. 271). For instance, if digital technologies have made it possible for students to participate in school classes and activities from home during lockdown, such a form of participation, along with all the all the opportunity it creates, also raises issues concerning its possible limitations: owning a connectable device featuring a front-cam, an adequate number of devices for each family member needing to connect at the same time, and a stable internet connection (just to mention some of the most evident and simple limitations, followed by many others). The COVID-19 pandemic might then function as a moment of self-consciousness of our "medial participation", putting forward how, also in regard of such aspects, making available is always inseparable from making unavailable, including from excluding. The challenge for the future of Media Studies will be then to always take into account such an ambivalent process at the basis of mediation and medial participation, especially in an era in which digital technologies pretend to guarantee everyone the possibility to participate at the same level in our new social life. The importance of this challenge is rather fundamental because if we are the medium then it is through such a process of mediation and participation that *we*, as subjectivities, emerge.

Untimely Resonations

I took the risk of meditating on an on-going event, such as COVID-19 pandemic because I believe that this peculiar moment entertains an intimate relation with the notion of post-media itself, for all the reasons I have tried to provide in the second part of this paper. This pandemic has been both the climax of the post-media condition as we have known it so far as well as a moment of self-consciousness of it and, more generally, of the radical mediation that presupposes it. Although the current usage of post-media – which I indirectly described by meditating on the present health emergency – are largely considered quite distant from Guattari, I wanted to let Guattari's thought – explored in the first part of this paper – resonate through all the meditations composing the second part. Resulting resonations, consonant or dissonant, will compose the conclusions of this paper.

Several of the elements composing a post-media constellation within Guattari's thought resonate harmoniously with our present condition of *post-media virality*. First among them is the ecological approach (epistemologically speaking), which is essentially trying to understand hybridity as a key element of *post-media virality*, as well as other fundamental notions such as the radical mediation and the Anthropocene. From an Anthropocenic perspective, moreover, we can detect traces of the ethical drive animating Guattari's ecosophy.

Thanks to the ecological approach, the role of technology in post-media virality is also consonant with Guattari's philosophy: the absence of discontinuity between

human and non-human agency, how our body is a medium inscribed in a process of mediation or the way in which wearable technologies are coupled with our bodies; each of these elements is highly compatible with the essential role of technology in Guattari's ecosophy. In other words, technology in the current post-media condition operates at a molecular level and therefore also at the heart of human sensibility, mind and libidinal activity.

Temporality is another essential dimension of a contemporary understanding of post-media: not only as the undeniable historicity of such a condition, but also as the ability to think within different temporalities inherent to different modes of existence. Such a complete time-architecture is what allows temporality to critically work against its time.

After these harmonious resonations, the most dissonant ones, concerning processes of subjectification, need to be further explored. In recent years we witnessed a large and increasing reappropriation of the means of communication – at least in terms of their materiality – that however did not clearly entail the production of new forms of unalienated singularities or creative processes of subjectification. By now, most people own a personal *means of communication*: a connected smartphone and/or personal computer, that is associated with a channel, a social media account, a blog, a space of expression, a virtual identity. Current pandemic and social distancing measures demanded specifically to resort to using them in order to keep working, learning, socialising. Moreover, they are used to invite people to stay home (#stayhome) and therefore implicitly address and lead them to buy into, donate, and share (fake) information. It seems that post-media virality entails rather Foucauldian forms of subjectification, in which the subject is produced by the *dispositive*, told by someone else, in which individuation means being controlled, tracked down, monitored, identified. Many are the reasons for such dissonance with Guattari's hope – I will briefly mention one: means of communication consist only of hardware, but also software, which turn out to be even more *desingularised* than traditional 'mass-media', working according to a uniforming logic.

Virality and desire as information

Instead of reducing the reason for dissonance to the uniform logic of software, in the remaining part of this paper I will dwell on a more philosophical and theoretical reason. It appears that what resonates harmoniously between Guattari's understanding of post-media and the contemporary understanding is what I have indicated as the *aesthetic* dimension of Guattari's thought, designating post-media conditions of possibility. In other words, Guattari's description of post-media conditions of possibility turned out to be a pretty accurate depiction of the current post-media condition. What differs deeply is instead its ethical orientation. The voluntarist and ethical connotation

of Guattari's post-media – the hope for and engagement with the creation of new forms of subjectification – has mostly disappeared both from contemporary understanding of this notion as well as from contemporary post-media society itself. I believe then that this ethico-aesthetical ambiguity is at the basis of the ambiguous relation that Guattari's notion of post-media entertains with our current condition: aesthetically speaking, Guattari's philosophy is definitely *on time* for describing the fundamental characters of our current experience; ethically speaking, Guattari's thought is incontrovertibly *untimely*, especially because of its critical distance towards the present time. In that sense, I would say that Guattari's post-media understanding turns out to be *out of season*, as Nietzsche's thought aimed at being: that is to say, borrowing Deleuze's words, "always against its time, critique of the present world [...] neither eternal nor historical, but out of our time and untimely" (Deleuze 1962, p. 107).

I proposed to approach the notion of post-media from a libidinal point of view because desire, a notion with a deeper background than post-media in Guattari's thought, is characterised by this very same ethico-aesthetical ambiguity. Therefore, I turn to desire – in the conclusion of this paper – to better understand how to critically twist post-media against our time. In his brilliant paper *Prosthesis of Desire*, Erich Hörl states something fundamental and yet rather ground breaking when it comes to the interpretation of Deleuze and Guattari's work: *The Anti-*Œdipus "begins to make sense [...] only when it is considered in this narration of an industrial, temporal shift" (Hörl 2014, p. 2). In other words, Hörl suggests understanding the *anti-*œdipal revolution as the discovery of the historicity of desire. That is why Deleuze and Guattari insist so forcefully on production and the industrial paradigm that "the factory replaces the theatre" (Hörl 2014, p. 2), that production replaces representation. Eventually, both Guattari and Deleuze move away from production and the factory paradigm: Deleuze by embracing the notion of *enchaînement* and by replacing the disciplinary environment of the factory with the fluidity and the ubiquity of control (Deleuze 1995; 1992); Guattari by switching from industrial mass-production to new communication and information technologies, both personalised and massified. From representation to production, from production to mediation.

Rather than the industrial "process of production" typical of mass-media societies, I suggest that the new paradigm of desire, built on the digital technology characterizing our times, should be then the *data-information* paradigm. For Deleuze, indeed, information should be understood as a "set of watchwords", generating a "system of control" (Deleuze 2006). Guattari, in turn, seems to prefigure the process of data mining and the consequent definition of uniforming trends: "technological transformations oblige us to be aware of both universalising and reductionist homogenisations of subjectivity and a heterogenetic tendency, that is to say, of a reinforcement of the heterogeneity and singularisation of its components" (Guattari 1995, p. 5). Here, we can observe the duality of desire and how it works both according to its time (aesthetical dimension), by producing a "reductionist homogenization of subjectivity" and against its time (ethical dimension), by introducing an opposite and "heterogenetic tendency". Deleuze himself

affirms that information as a watchword corresponds to a counter-information, and which could develop into an act of resistance. Desire as *enchainement* is then both the algorithmic chain of information and the resisting creative network.

What is particularly interesting in respect to post-media virality is that the virus itself is information: genetic information that spreads through a process of mediation. Virality, indeed, in media language, is referred to as the wide horizontal spreading of digital content (Sampson 2012; 2019). What post-media virality is telling us, then, through such a libidinal approach, is that one reason the post-media condition did not entail a 'heterogenetic tendency' producing singularities, but rather a homogenisation of subjectivity, might be such a viral condition. Desire as information is a watchword that spreads following the logic of contagion. We can protect ourselves from the virus – from the command and the control inherent in desire as information –, and that is why it is important to insist on the opacity of mediation as well as its 'protective' function. But protection is not enough for producing singularities. The challenge of critically using Guattari's notion of post-media against post-media virality is to resist contagion and its homogenisation logic.

Bibliography

Arjun Appadurai: *Modernity at Large: Cultural Dimensions of Globalization*. Minneapolis 1996.

Elke Bippus / Beate Ochsner / Isabell Otto: Between Demand and Entitlement. Perspectives on Researching Media and Participation. In Mathias Denecke / Anne Ganzert / Isabell Otto / Robert Stock (Eds.): *ReClaiming Participation. Technology – Mediation – Collectivity*. Bielefeld 2016, pp. 261–287.

Jacopo Bodini / Mauro Carbone: *Voir selon les* écrans*, penser selon les* écrans, Paris 2016.

Judith Butler: *Subjects of Desire. Hegelian Reflections in Twentieth-Century France*. New York 1987.

Mauro Carbone / Anna Caterina Dalmasso / Jacopo Bodini: *Vivre par(mi) les* écrans. Dijon 2016.

Mauro Carbone: *Philosophy-Screens. From Cinema to the Digital Screens*. Albany 2019.

Mauro Carbone: We'll show you (who we are): Screens in the Pandemic. In: *Thinking C21*, 24.4.2020.

Francesco Casetti: Mediascape. A Decalogue. In: *Perspecta*, issue 51 on "Medium", 2017.

Dominique Chateau / José Moure (Eds.): *Screens. From Materiality to Spectatorship. A Historical and Theoretical Reassessement*. Amsterdam 2016.

Gilles Deleuze / Félix Guattari: *Kafka. Towards a minor literature* (1975). Minneapolis 1986.

Gilles Deleuze / Félix Guattari: *The Anti-Œdipus. Capitalism and Schizophrenia* (1972). Minneapolis 1983.

Gilles Deleuze / Claire Parnet: L'Abécedaire de Gilles Deleuze [DVD]. Arte, 1995. Éditions Montparnasse Paris.

Gilles Deleuze: *Nietzsche and Philosophy* (1962). London 2002.

Gilles Deleuze: Post-Scriptum on the Societies of Control. In: *October*, vol. 59, 1992, p. 3–7.

Gilles Deleuze: *The Logic of Sense* (1969). London 1990.

Gilles Deleuze: What is the Creative Act? In: Gilles Deleuze: *Two Regimes of Madness, Texts and Interviews 1975–1995*. Cambridge 2006, p. 312–324.

Ruggero Eugeni: *La condizione post-mediale*. Firenze 2015.

Maurizio Ferraris: Virus. Echi del mondo che verrà. In: *il Manifesto*, 29.3.2020.
Michel Foucault: *The History of Sexuality. The Will to Knowledge* (1976). London 1978.
Richard Grusin (Ed.): *After Extinction*. Minneapolis 2018.
Richard Grusin: Radical Mediation. In: *Critical Inquiry*, vol. 42, 2015.
Félix Guattari: *Chaosmosis. An ethico-aesthetic paradigm* (1992). Sydney 1995.
Félix Guattari: Du postmoderne au postmédia (1985). In: *Multitudes*, No. 34, 2008, p. 128–133.
Félix Guattari: *The Three Ecologies* (1989). London 2000.
Mark B. N. Hansen: *New Philosophy for New Media*. Cambridge 2004.
Georg W. F. Hegel: *The Phenomenology of Spirit* (1807). Cambridge 2018.
Erich Hörl: Prosthesis of Desire. On Bernard Stiegler's new critique of projection. In: *Parrhesia*, n. 20, 2014.
Rosalind Krauss: *A Voyage on the North Sea: Art in the Age of the Post-Medium Condition*. London 2000.
Rosalind Krauss: Reinventing the Medium. In: *Critical Inquiry*, vol. 25, 1999, p. 289–305.
Rosalind Krauss: *Under Blue Cup*. Cambridge 2011.
Craig Lundy: The Necessity and Contingency of Universal History. Deleuze and Guattari contra Hegel. In: *Journal of Philosophy of History*, vol. 10, 2016, p. 51–75.
Angela Maiello: Post-media Virality: We Are the Medium (of the Virus). In: *Thinking C21*, 25.3.2020.
Lev Manovich: Post-Media Aesthetics. (2001) In: Marsha Kinder / Tara McPherson (Eds.): *A Decade of Discourse on Digital Culture*. Berkeley 2007.
Maurice Merleau-Ponty: *Institution and Passivity. Course Notes from the Collège de France (1954–1955)*. Evanston 2010.
Maurice Merleau-Ponty: *The Visible and The Invisible* (1964). Evanston 1969.
Friedrich Nietzsche: *Thoughts Out of Season*, translated by Anthony M. Ludovici. Edinburgh 1909.
Friedrich Nietzsche: *Unfashionable Observations*, translated by Richard T. Grey. Stanford 1995.
Tony D. Sampson (Ed.): *Affect and Social Media. Emotion, Mediation, Anxiety and Contagion*. Lanham 2019.
Tony D. Sampson: *Virality. Contagion Theory in the Age of Networks*. Minneapolis 2012.
Gilbert Simondon: *On the Mode of Existence of Technical Objects* (1989). Minneapolis 2017.
Peter Weibel: The Post-Media Condition (2005). In: *Postmedia Condition*, Madrid 2006.

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"Work it"

Demands and Entitlements of Post-Medial Participation[1]

"The revolution will put you in the driver's seat"
– *Gil Scott-Heron*

"Refusing the status of the current media", Félix Guattari claims in 1992, "combined with a search for new social interactivities, for an institutional creativity and an enrichment of values, would already constitute an important step on the way to a remaking of social practices." (Guattari 1996a, p. 272) In a newspaper article published in *Le Monde*[2] Guattari outlines his desire for a "post-media era" (ibid., p. 264).[3] Calling for "a new art of living in society" (ibid. 1995a, p. 20), he presents a concept of "medial participation" (Bippus/Ochsner/Otto 2016, p. 261). Guattari's approach to participation is characterised by a conceptual, a medial and a praxeological pillar and aims to change "the modes of production of subjectivity" (Guattari 2000, p. 49; ibid. 1996a, p. 266). It requires a conceptual rethinking of the subject, an appropriation of mass media which can co-produce new modes of subjectivation as well as their constantly renewed enactment in practices. The point of departure for my analysis is Guattari's emphasis on practices. My question is to what extent these practices still allow us to think about participation under today's medial conditions. Precisely, I ask whether post-media practices provide a fertile ground for outlining an alternative to contemporary modes of subjectivation. Today's subjectivation through computational media is poignantly described by Tiqqun's "cybernetic hypothesis" (Tiqqun 2010). The French author collective detaches cybernetics from its historical-interdisciplinary context as a post-war science of control and ascribes it the task of penetrating all areas of life

1 Work it. Song title by Marie Davidson (*Working Class Woman*, released on Ninjatune, 2018). https://marie-davidson.bandcamp.com/album/working-class-woman.

2 See the article at: http://www.jef-safi.net/spip/spip.php?article869; 15.07.2020; the newspaper article is considered the last text published by Guattari himself.

3 The unfinished post-media concept cannot be considered in its entirety. Therefore, I concentrate on the aspects production of subjectivity, media technologies and practices. I arrange text passages from several of Guattari's publications on post-media around the article cited at the beginning (1996a). Post-media eventually belongs to a larger project of an "Ecosophic democracy" (ibid., p. 272).

through the logic of computational calculability. It stands out as the dominant mode of control of the population, relying on "a combination of *surveillance and data capture [dispositives]*" (ibid., p. 20; original emphasis).[4] Tiqqun elaborate that "the former are inspired by prison, insofar as they introduce a centralized system of panoptical visibility. […] The latter, the data capture [dispositives], are inspired by computer technology, insofar as they are part of the construction of a decentralized real-time gridding system." (Ibid., p. 55) Before the backdrop of these "control [dispositives]", (ibid., p. 21) I propose a reading of post-media practices through the lens of Tiqqun. This illustrates two aspects of participation. In general, Guattari's diagnosis of the subject produced through mass media can be employed to describe today's mode of subjectivation through computational media of control. Furthermore, an alternative to mass media subjectivation affords not only another concept of the subject but also its actualisation in practices. Guattari, I argue, underscores a fundamental condition of participation: practicing alternative modes of subjectivation is work. And this remains true today.

Mass media and homogenised subjectivity

With his description of the mass media subject, Guattari presents a diagnosis that has not lost its relevance. In particular, Guattari attests television viewers passivity. Andreas Broeckmann specifies that it is "the mass media's commercial mega-structures which construct homogenised media consumers" (Broeckmann 2014). Mass media produce homogenised subjects because they filter information. "[A]ll great positive contemporary upheavals, positive or negative", Guattari warns, "are currently judged on the basis of information filtered through the mass media industry". This is challenging because it "never […] problematizes what is at stake, in its full amplitude." (Guattari 1996a, pp. 262–263) The stakes are nothing less than "[o]ur survival on this planet". And this "is not only threatened by environmental damage but by a degeneration in the fabric of social solidarity and in the modes of psychical life" (ibid., 1995a, p. 20).[5] Under the condition of mass media, however, this remains underrepresented. Guattari notes: "the banality of the world represented to us by the media, surround[s] us with a reassuring atmosphere in which nothing is any longer of real consequence." (Ibid. 1996a, p. 262) Mass media create a passive atmosphere in which no sense of

4 In the original version the "devices" are "dispositives": "un mixte de *dispositifs de surveillance et de saisie*" (Tiqqun 2001, p. 55; original emphasis). With *government* Tiqqun follow Foucault's reading of the "Greek word *kubernèsis*" in terms of "the 'act of directing, governing'" (ibid. 2010, p. 5; original emphasis). They interpret "the image of piloting" as "the cardinal metaphor for describing not only politics but also all human activity." (Ibid., p. 6) For a theoretical analysis of contemporary data capture technologies, see Hörl 2018, p. 161.

5 Slightly varied also as "[e]cological disasters, famine, unemployment, the escalation of racism and xenophobia" (Guattari 1996a, p. 262).

responsibility of individuals for themselves, for others, and for the planetary catastrophe can be developed.[6] Herein lies the crisis of the media. Yet, it is itself 'symptomatic' of the deeper crisis of subjectivity (ibid., p. 266). In essence, it describes a "certain universal representation of subjectivity" (ibid. 1995a, p. 3).[7] Guattari specifically depicts a "capitalistic subjectivity" which he labels as "the subjectivity of generalised equivalence" (ibid., p. 22; cf. Hörl 2017, p. 18). It concerns "a subjectivity which seems likely to blot out, with its greyness, the faintest traces and last recesses of the planet's mysteries." (Guattari 1995a, p. 22)[8]

This inventory of the subject's position resembles the diagnosis made by Tiqqun: The subject is reduced to a shell. "Since the cybernetic hypothesis as a whole calls for a radically new physical structuring of the subject", state Tiqqun, "whether individual or collective, its aim is to *hollow it out*." (Tiqqun 2010, p. 13; original emphasis) This hollowing out refers – as with Guattari – to the 'mode of subjectivation' which Tiqqun relate to the process of binary discretisation and its relation to the exercise of power. The discretion of the living world through "binary machines" allows to translate human behaviour into machine readability (Ibid., p. 5; cf. Hörl 2018, pp. 160–161). Dispositives of surveillance referring to the panopticon and dispositives of capture denoting the production of behavioural information about persons, aim at the creation of transparency. These dispositives are designed to make the behaviour of persons predictable: "cybernetics gave rise to a *new politics of subjects*, resting on communication and transparency to oneself and to others." (Tiqqun 2010, p. 14; original emphasis) Guattari's analysis of mass media can be applied to the production of subjects through computational media as described by Tiqqun. The dreary, homogenised subject is the product of a de- and reterritorialisation. Guattari explicates that "the capitalistic drive has always combined two fundamental components. One of these components is the destruction of social territories,[9] collective identities, and traditional value systems. I qualify this as deterritorialization." (Guattari 2009a, p. 292)[10] Subsequent to the 'destruction' of subjectivity is its capitalist resubjectivation: "The other component is the reconstitution […] of individuated personological frameworks,

6 "The tele-spectator remains passive in front of a screen, prisoner of a quasi-hypnotic relation, cut off from the other, stripped of any awareness of responsibility." (Ibid., p. 263)

7 As will be shown later, Guattari is precisely concerned with replacing this representation with a permanent production of subjectivity.

8 The subject resides in "the pervasive atmosphere of dullness and passivity" (ibid. 2000, p. 69). For a detailed elaboration and problematization of the 'Bloom', see Michel Schreiber's doctoral project.

9 The term "territories" is distinct from Freudian vocabulary: "To speak of […] existential Territories rather than the instances of the self and of transference" (ibid. 1995b, p. 126).

10 Media and capitalism are inseparable. Capitalism means the "Post-industrial capitalism" described by Guattari in the sense of an "*Integrated World Capitalism* (IWC)", which increasingly aims at the production of subjectivity: IWC "tends increasingly to decentre its sites of power, moving away from structures producing goods and services towards structures producing signs, syntax and – in particular, through the control which it exercises over the media, advertising, opinion polls, etc. – subjectivity." (Ibid. 2000, p. 47; original emphasis)

schemata of power, and models of submission [...]. I consider this last component a movement of 'reterritorialization'." (Ibid.) With Tiqqun we can add: "It's no longer a question of removing the subject from the traditional exterior bonds [...], but of reconstructing the social bonds by depriving the subject of all substance." (Tiqqun 2010, p. 14) The aim of cybernetic control is to establish "*total transparency*". Regarding particularly human behaviour, its goal is to melt the difference between "the map and the territory". In this it reveals "a will to knowledge accumulated to such degree that it becomes a will to power." (Ibid., p. 20) Guattari's passive, solipsistic mass media subject finds a pendant in Tiqqun's binarized subject of a "*fleshless envelope*" (ibid., p. 14; original emphasis). So he adds: "Subjectivity disappears into the empty stakes of profit and power." (Guattari 1996a, p. 272) Guattari's description of the generalised subject has not lost its relevance.

Heterogeneous subjectivity

Guattari works against the generalizing mode of subjectivation. He confronts it with the concept of heterogeneity: "What I want to emphasize is the fundamentally pluralist, multi-centered, and heterogeneous character of contemporary subjectivity, in spite of the homogenization it is subjected to by the mass media." (Ibid., p. 266)[11] He opposes this open and diverse subject to mass media solipsism:

> an individual is already a 'collective' of heterogeneous components. A subjective phenomenon refers to personal territories – the body, the self – but also, at the same time, to collective territories – the family, the community, the ethnic group. And to that must be added *all the procedures for subjectivation* embodied in speech, writing, computing and technological machines.
>
> *(Ibid., pp. 266–267; emphasis MD)*

Developing an alternative concept of subjectivity, however, will not be sufficient to transit into a post-media era. Guattari notes: "The joy of living, solidarity, and compassion with regard to others, are sentiments that are about to disappear and that must be protected, enlivened, and propelled in new directions." (Ibid., p. 266) And this must first and foremost be achieved through practices. However, this task does not all-inclusively concern society. Guattari only imagines "organized minorities" which he

11 Guattari also practices ideology criticism here. Referring to the possibility of making an alternative conceivable at all, he rumbles against the "postmoderns": "The references that these different doctrines ceaselessly borrowed from the new communicative and information technologies were so hurried and so badly managed, that they threw us far behind the phenomenological research that had preceded them." (Ibid. 2009a, pp. 295–296) In particular, he aims at the detachment from logocentrism and the structuralism that supports it, which for him contributes to "conservative reterritorialization" (ibid., p. 293).

considers to be "the laboratories of thought and experimentation for future forms of subjectivation" (ibid. 2009, p. 301).[12] These experimental practices require work in various ways. Guattari in *The Three Ecologies* insists:

> There will have to be a massive reconstruction of social mechanisms [...] [which] will not come about through centralised reform, through laws, decrees and bureaucratic programmes, but rather through the promotion of innovatory practices, the expansion of alternative experiences centred around a respect for singularity, and *through the continuous production* of an autonomizing subjectivity that can articulate itself appropriately in relation to the rest of society.
>
> *(Ibid. 2000, p. 59; emphasis MD)*

Guattari calls for action. Since alternative modes of post-medial subjectivation do not develop on their own, they are bound to their emergence in and through practices. In order to "produc[e] innovative practices" which are capable of addressing the urging psychic, social and environmental problems of our time[13], there is the need to set up a "collective dialogue" (ibid. 1996a, p. 263). For this purpose, every individual must first of all, in order to enter into a dialogue, free itself from the passive atmosphere of mass media. At the same time, every individual taking part in the post-media revolution is obliged to *remain* active since the alternative modes of subjectivation to be developed are not only dependent on their enactment in practices, they are also 'at risk'. This is precisely what makes up the programmatic of Guattari's project, which proves an important aspect for the discussion of media participation today.

Guattari asks in relation to the 'organized minorities': "how can they structure themselves, and ally themselves with more traditional forms of organization (parties, unions, leftist groups) to avoid the isolation and repression that threatens them, while at the same time preserving their independence and specific traits?" (Ibid. 2009b, p. 301) These groups are constantly exposed to the danger of being appropriated by the "deeply reterritorializing tendencies of current capitalist subjectivity" (ibid. 2009a, p. 292). Post-media is above all work against reappropriation.[14] Guattari summarises: "Ethical and aesthetic values do not arise from imperatives and transcendent codes. They call for an existential participation based on an immanence that must be endlessly

12 Guattari speaks of "subject-groups", who still do have a responsibility to society as a whole: "An essential programmatic point for social ecology will be to encourage capitalist societies to make the transition from the mass-media era to a post-media age, in which the media will be reappropriated by a multitude of subject-groups capable of directing its resingularization." (Ibid. 2000, p. 61; cf. 1996a, p. 263: "groups of people"; cf. 2009a, p. 300)

13 For a historical analysis of the terms environment, milieu, environment and ecology and the location of their current boom, see Sprenger 2014. If not marked otherwise, environment and ecology in the following refer to nature or the natural environment.

14 Hörl underlines this double movement, which simultaneously attempts to detach itself from the "general equivalent" and discusses new modes of subjectivation (cf. Hörl 2017, p. 20).

reconquered." (Ibid. 1996a, p. 266)[15] That is, to establish and preserve an "existential participation" in practices that is disguised by mass media subjectivation (ibid. 2000, p. 49). This applies to the necessary work on participation, which must continuously be established over and over again. It also applies to the aspect that participation that is not aimed at all-inclusion takes place both in distinction to others and in connection with others.

Of course, Guattari's focus also has its problems. While post-media may be a programmatic, it is one that has no program. It does not issue concrete instructions or options for action. The "new practices of subjectivation" and "innovative forms of dialogue"[16] remain undetermined, they have yet to be invented (ibid. 2009a, p. 299). More broadly, this also concerns the "collective interactivity" and eventually nothing less than "a reinvention of democracy" (ibid.). Looking to the future, he also writes in a generalizing manner that "[t]echnological evolution will introduce new possibilities for interaction." (Ibid. 1996a, p. 263) All that is certain is that the alternative modes of subjectivation to be produced must differ from the mass media subject. While Broeckmann suggests that Guattari is more concerned with "pointing to a general media-ecological situation" than he is with "specific practices", (Broeckmann 2014) Tiqqun's accusation is even more incisive. Also referring to the *Le Monde* article, Tiqqun criticise Guattari for his short-sightedness regarding social conflicts (Tiqqun 2010, p. 28). "Social cooperation is presented as if it were a pre-ordained given, with no ethical incommensurability and no interference in the circulation of [affects], no community problems." (Ibid., p. 29)[17] In doing so, they deprive him of an awareness of all the conflicts that arise when the group subjects make the transition to post-media. On the one hand, this is certainly due to the lack of concrete instructions for action that could have brought such problems to light. On the other hand, social conflicts arise precisely in the attempt to (re)appropriate mass media.

15 Guattari writes only once about "existential participation". It should be added that this refers both to the disclosure under the conditions of the mass media and to their enactment and preservation through practices.

16 Elsewhere, Guattari complains that the "direct exchange between individuals has tended to become rare. Subjectivity is *forged through multiple mediations*, whereas individual relations between generations, sexes, and proximal groups have weakened." (1996a, 267; emphasis MD) By these 'mediations' Guattari does not understand the appropriation of media: "For example, the role of grandparents as an intergenerational memory support for children has very often disappeared. The child develops in a context shadowed by television, computer games, telecommunications, comic strips." (Ibid.) Against this backdrop, it becomes clear why Guattari speaks of "*innovative* forms of dialogue" (2009a, p. 299; emphasis MD), as it is a matter of maintaining this relationship through and with media.

17 The English version translates this as "emotions", whereas the original says: "la circulation des affects". (Tiqqun 2001, p. 63)

Post-media

Guattari's texts are characterised by a reflexive understanding of the computational media. In addition to their capitalist instrumentalisation, he also ascribes them an emancipatory potential: "Technological transformations oblige us to be aware of both universalising and reductionist homogenisations of subjectivity and of a heterogenetic tendency, that is to say, of a reinforcement of the heterogeneity" (Guattari 1995a, p. 5).[18] This tendency is unfolded through practices that in turn depend on the media. Guattari writes concisely: "The emergence of these new practices of subjectivation of a post-media era will be greatly facilitated by a concerted reappropriation of communicational and information technology" (ibid. 2009a, p. 299). Such technologies offer Guattari in particular the possibility of 'connecting' with others, they are the basic prerequisite for a joint dialogue. But this does not apply without restrictions. "Technological developments", Guattari says elsewhere, "together with social experimentation […] are *perhaps* capable of leading us out of the current period of oppression and into a post-media era characterised by the reappropriation and resingularisation of the use of media." (Ibid. 1995a, p. 5; emphasis MD)[19] The takeover of the media and their alternative use are subject to reservation.[20] It depends on the practices. He notes: "Obviously, we cannot expect a miracle from these technologies: it will all depend, ultimately, on the capacity of groups of people to take hold of them, and apply them to appropriate ends." (Ibid. 1996a, p. 263; cf. ibid. 1995b, p. 120) Media are the condition of the possibility of change, which must be facilitated by practices. As I explained in the first part, the appropriation of the media itself is subject to another condition. On this cascade of the condition of the condition of possibility, Guattari writes that "[w]e cannot conceive of a restructuring of the mass media toward a collective reappropriation of their use

18 Even though Guattari mainly refers to mass media, he has a feeling for the new emerging power constellation. Recently, there have been an increasing number of descriptions that connect the relocation of the media to a 'becoming environmental' exercise of power (Hörl 2018; Sprenger 2019). The exercise of power, which is no longer exercised in a disciplinary manner in the Foucauldian sense (self-technology), but rather in an environmental way (ibid.), i. e. by influencing the subjects' environment, is already laid out in Guattari's work. This refers both to the "atmosphere" created by mass media, which surrounds the subject and conditions it (Guattari 1996a, p. 262; 2000, p. 69), as well as to the heterogeneous production of the subjects through and in their respective environment, as Guattari clearly names it using the example of "La Borde": "everything there is set up so that psychotic patients live in a climate of activity and assume responsibility, not only with the goal of developing an ambience of communication, but also in order to create local centres for collective subjectivation. Thus it's not simply a matter of remodelling a patient's subjectivity […] but of a production *sui generis*." (Ibid. 1995a, p. 6; original emphasis) The environment is the condition for the production of the subjects, regardless of whether they are patients or TV viewers.

19 In parentheses he adds the following to the media: "Access to data-banks, video libraries, interactivity between participants, etc." Their "resingularization" contrasts with the homogenising program of the mass media (ibid., p. 5-6).

20 The fact that Guattari here specifically speaks of a possibility of their adoption is also made clear elsewhere: "The junction of the audiovisual screen, the telematic screen and the computer screen *could lead* to a real reactivation of a collective sensibility and intelligence." (Ibid. 1996a, p. 263; emphasis MD)

that is not consequent upon a re-singularization of subjectivity" (ibid. 1996b, p. 202).[21] The conceptual reformulation of prevailing modes of producing subjectivity precedes the appropriation of the media and the establishment of a common dialogue. If computational media, as one condition among many others, are operating in an arrangement with practices and a new thinking of subjectivation, Guattari's understanding of media is neither deterministic nor does he disclaim their crucial function for the establishment of a collective, emancipating dialogue.

A delicate assumption, however, is that media can in principle be (re)appropriated. This still applies even if their detachment from mass media relations requires a constant work of such decoupling. If Guattari ponders the liberation of the media from capitalist connections, he misjudges various asymmetries of power. Fundamentally, there is a technical barrier, which today ultimately culminates in proprietary codes. As soon as it is not a matter of radio technology that can be converted into one's own broadcasting device in playfully guided handicraft work, 'reappropriation' requires special knowledge. This applies equally to the mass media at the end of the 1980s and to the current media technological condition. Post-media meets the problem that not everyone can – or wants to – acquire this knowledge. And those who have this knowledge usually receive more lucrative offers to apply it.[22] The question of media inevitably also affects the question of the social post-media personnel. Guattari assumes that volunteers will come along to help shape a revolution. What is not self-evident is the cost of dissociating oneself from the media. What is not taken into account is that the detachment is also accompanied by renunciations. While Guattari's status quo is primarily characterised by a passive mentality that does not require any work on the revolution, the situation has become more acute. For today it is about more than convenience. While Guattari was only just beginning to see the broad implementation of information technologies in everyday life, they are now an unquestioned prerequisite for access in many areas of both private and public life: "from connecting with friends in online social networks, to shopping and traveling and engaging with public and private institutions." (Brunton, Nissenbaum 2011, p. 2) We find ourselves in a tight net of habitual relationships of dependence. Shoshana Zuboff's broadly discussed approach to contemporary's media technological condition underscores this. Following Zuboff the mode of subjectivation "is institutionalized in the automatic undetectable

21 Here, I am referring specifically to an earlier version of the previously cited text *On the Production of Subjectivity* (ibid. 1995a), which first appeared in 1990 as *Subjectivities: for Better and for Worse* (ibid. 1996b). It is interesting to note that (in this case, regardless of the different translations) the early version still places an emphasis on media, whereas in the amended version, which was included in *Chaosmosis*, they no longer apply. There it says: "We cannot conceive of a collective recomposition of the socius, correlative to a resingularisation of subjectivity, without a new way of conceiving political and economic democracies that respect cultural differences – without multiple molecular revolutions." (Ibid. 1995a, pp. 20–21)

22 See for example the lecture of the *Invisible Committee* at the meeting of the *ChaosComputerClub* in 2014: "Another obstacle for the hacker movement […] is in managing to draw a front line in its own ranks between those working for a better government, or even *the* government, and those working for its destitution. The time has come for *taking sides*." (The Invisible Committee 2015, p. 128; original emphasis)

functions of a global infrastructure that is also regarded by most people as essential for basic social participation." Here, 'participation' means access to public life in general. She exaggerates: "like the apple in the garden, once tasted they are impossible to live without." (Zuboff 2015, p. 83) Even if these relations are not forced, withdrawal has its price. Brunton and Nissenbaum add:

> the degree to which data collection is an integral part of modern life, […] renders any attempt at an 'opt-out' life onerous at best and ridiculous at worst: cash transactions, off-the-books employment, and pay phones, without plane travel, a vehicle, health insurance, or Internet access except under carefully managed conditions. *(Brunton, Nissenbaum 2011, p. 6)*

Without judging the extent to which a consequent withdrawal from accustomed living conditions entails cutbacks, it cannot be disregarded that the detachment from the media technological condition has "social and personal cost[s]" (ibid.).

The key problem ultimately lies in that function of the computational media which goes beyond the facilitation of dialogical communication and accessibility to everyday life. This involves the connection of computational media technologies with each other, to which we can in turn connect: "we can presume, on this subject", notes Guattari, "that it is the connection, through networking, of banks of data which will offer us the most surprising views" (Guattari 2009a, p. 299). The 'banks of data' are now a cipher for the comprehensive calculation of the world through information technologies. Guattari refers to the technical calculability of nature, which he explicitly views positively. In *Regimes, Pathways, Subjects* he describes the potentials of databases for the containment of problems of the natural environment. "The temporal dimensions to which microprocessors provide access", Guattari broods, "allow enormous quantities of data and huge numbers of problems to be processed in infinitesimal amounts of time". They permit one "to stay abreast of the challenges and issues confronting them." (Ibid. 1992, p. 29) Information technologies, in this case for instance the computer-simulated calculation of different future scenarios gave post-medial subjects a temporal advantage that they could use to find solutions to the planetary environmental catastrophe. Guattari makes this even more acute in the article in *Le Monde*. He expects that "all the creative forces of the sciences, the arts, social innovations, […] become entangled and constitute a mecanosphere surrounding our biosphere […], exploring the future of humanity." (Ibid. 1996a, pp. 267–268) The possibility of a non-capitalistically integrated mecanosphere seems utopian today. "In this renovated political ecology", criticise Tiqqun, "socialism and cybernetics would attain to their point of optimal convergence: the project of a green republic". And this "*technological democracy*" marks "the lethal vision of a definitive civil peace between humans and non-humans." (Tiqqun 2010, p. 28; original emphasis) In concrete terms, they see the problem in not considering the resilience of power structures. "What the utopians pretended not to know", argue the collective of authors, "was that the integration of technological thinking

by everybody would in no way undermine the existing power relations." (Ibid.) And this again refers to the cybernetic regime of transparency. If we follow Guattari's post media conceptual ideal of relating subjects, media technology, and nature, this regime expands far beyond human behaviour. Tiqqun respond that "[t]he acknowledgement of the man-machines hybridity in social arrangements would certainly do no more than extend the struggle for recognition and the tyranny of transparency to the inanimate world." (Ibid.)

Conclusion

Guattari's post-media utopia describes the necessity of working incessantly on the transition to the post-media era. In terms of medial participation, it requires a rethinking of the subject, the appropriation of media that allows for interconnection with like-minded others, the establishment of a collective dialogue and the joint invention of new practices in order to finally address social and environmental problems. Post-media is still a utopia. Guattari himself poses the burning question of why the revolution has not yet taken place:

> Why have the immense *processual potentials* brought forth by the revolutions in information processing, telematics, robotics, office automation, biotechnology and so on up to now led only to a monstrous reinforcement of earlier systems of alienation, an oppressive mass-media culture and an infantilizing politics of consensus? *(Guattari 1992, p. 29; emphasis MD)*[23]

Guattari neglects the challenges that he imposes on his post-media operators. Medial participation, which has the 'demand' for modes of non-capitalist subjectivation, is subject to the following 'entitlements' (Bippus, Ochsner, Otto 2016, p. 261) according to Guattari's discussion: Participation does not start with a blank slate, we are always more or less compelled to be part of and participate in a social order. The condition for a different mode of participation is therefore the personal price to be paid for the release from the status quo. Alternative modes of participation are carried out in practices. The establishment of alternate possibilities to *the way we do not want to live* therefore means work. It is effort in the sense of demanding physical and mental resources; it takes up our time and knowledge. This is all the more true when these practices are in danger of being absorbed repeatedly. Last but not least, the social conflicts that arise within alternative modes of participation must be recognised. In particular, they are also related to the question of technology. Their appropriation

23 The 'processual potentials' are directed primarily against the capitalist reterritorialization of technology and mass media, but also against the hierarchically organized, seemingly fixed structures of mass media.

requires specific knowledge which – if it can be acquired at all – is bound to individual persons who may be poached. Technology is never neutral and cannot be permanently freed from its power structures. Medial participation, as Guattari would put it, is a constant conflict with oneself, others and one's technical and natural environment. It is, if it is understood as practice, first and foremost ongoing work and a programme that constantly revises itself. The revolution entitles you to take the driver's seat – and it demands you to *work it*.

Bibliography

Elke Bippus / Beate Ochsner / Isabell Otto: Between Demand and Entitlement. Perspectives on Researching Media and Participation. In: Mathias Denecke / Anne Ganzert / Robert Stock / Isabell Otto (eds.): *ReClaiming Participation. Technology – Mediation – Collectivity*. Bielefeld 2016, pp. 261–286.

Félix Guattari: Entering the Post-Media Era. In: *Soft Subversion. Texts and Interviews 1977–1985. Translated by Chet* Wiener *and Emily Wittman*. Los Angeles 2009b, pp. 301-306.

Felix Guattari: On the production of subjectivity. In: *Chaosmosis. An ethico-aesthetic paradigm. Translated by Paul Bains and Julian Pefanis*. Bloomington/Indianapolis 1995a, pp. 1–32.

Félix Guattari: Postmodern Deadlock and Post-Media Transition. In: *Soft Subversion. Texts and Interviews 1977–1985. Translated by Chet Wiener and Emily Wittman*. Los Angeles 2009a, pp. 291–300.

Félix Guattari: Regimes, Pathways, Subjects. Translated by Brian Massumi. In: Jonathan Crary / Sanford Kwinter (eds.): *Incorporations*. New York 1992, pp. 16–36.

Félix Guattari: Remaking Social Practices. In: Gary Genesko (ed.): *The Guattari Reader*. Oxford 1996a, pp. 262–272.

Félix Guattari: Subjectivities: for better and for Worse. In: Gary Genesko (ed.): *The Guattari Reader*. Oxford 1996b, pp. 193–203.

Félix Guattari: The ecosophic object. In: *Chaosmosis. An ethico-aesthetic paradigm*. Translated by Paul Bains and Julian Pefanis. Bloomington/Indianapolis 1995b, pp. 119-135.

Félix Guattari: *The Three Ecologies. Translated by Ian Pindar and Pail Sutton*. London / New Brunswick 2000.

Erich Hörl: Introduction to general ecology: The ecologization of thinking. Translated by Nils F. Schott. In: ibid., with James Burton (ed.): *General Ecology. The New Ecological Paradigm*. London / New York 2017, pp. 1–73.

Erich Hörl: The Environmentalitarian Situation. Reflections on the Becoming-Environmental of Thinking, Power, and Capital. Translated by Nils F. Schott. In: *Cultural Politics* 14 (2), 2018, pp. 153–173.

Florian Sprenger: *Epistemologien des Umgebens. Zur Geschichte, Ökologie und Biopolitik künstlicher Environments*. Bielefeld 2019.

Florian Sprenger: Zwischen *Umwelt* und *milieu* – Zur Begriffsgeschichte von *environment* in der Evolutionstheorie. In: *Forum Interdisziplinäre Begriffsgeschichte* 3 (2), 2014, pp. 7–18.

The Invisible Committee: *To Our Friends*. Cambridge 2015.

Tiqqun: L'Hypothèse cybernétique. In: *Tiqqun. Organe de liaison au sein du Parti Imaginaire. Zone d'Opacité Offensive* (2). Paris 2001, pp. 40–83.

Tiqqun: *The Cybernetic Hypothesis*. The Anarchist Library, 2010.

Shoshana Zuboff: Big Other: Surveillance Capitalism and the Prospects of an Information Civilization. In: *Journal of Information Technology* 30, 2015, pp. 75–89.

Online Sources

Andreas Broeckmann: "Postmedia" Discourses. A Working Paper. Online: http://www.mikro.in-berlin.de/wiki/tiki-index.php?page=Postmedia+Discourses, 2014; 15.07.2020.

Finn Brunton / Helen Nissenbaum: Vernacular Resistance to Data Collection and Analysis: A Political Theory. In: *First Monday,* 16 (5). Online: https://firstmonday.org/ojs/index.php/fm/article/view/3493, 2011; 15.07.2020.

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