

# Mobile phone signals and protest crowds

Performing an unstable post-media constellation

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Only crowds have acted, only crowds have  
changed things.

PIT SCHULTZ

## THE CAPTURE OF AFFECT AND HIGH FREQUENCY MODULATION

Twenty years after Pit Schultz' praise of the exclusive agency of the crowd,<sup>1</sup> the relation between the individual and the crowd has become a matter of digital processing. New levels of affective production, captured by new levels of continuous over-coding of the resulting affective intensities into regimes of equivalence and control, become the trajectories of our media-technological environment under the aegis of contemporary capitalism. Today, sociality amongst local peers passes through data silos on the other side of the planet. Never before have topologies of sociality been put under such a geo-spatial spreading.

Prior to this spread routing, sociality undergoes multiple and rigid formatting procedures to fit into digitally viable regimes of expression. Contemporary subjects, who are constantly mediating their modes and modalities of expression with the corporate social media platforms' interfaces and their mobile devices,

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1 "Techno: Psycho-Social Tumult" published in the archives of the 2nd *next five minutes* website, from 1996. See: <http://www.tacticalmediafiles.net/n5m2/media/texts/schultz.htm>

are amassing and stratifying this dispersed and dissected socius as if it were a collective search for a new metastability.

This reciprocal processing and production of affective signals between subjects and machines indicates a new formation of techno-regimes of expressions that tap into previously uncharted sources for soft social engineering and control. Likewise the multi-faceted and complex dependencies that ultimately rest on such algorithmic processing of social relations are also important. One such dependency is the availability of individually-modulated electromagnetic signals. The Universal Mobile Telecommunications System (UMTS), the 3<sup>rd</sup> generation mobile cellular system based on GSM, operates in Europe somewhere in the range of 1900 MHz (uplink) and 2100 MHz (downlink). It is via such frequency modulations that contemporary subjects turn into *physically isolated* and anonymous, but *bodily connected* and personalized subjects.

This split, where affective modulation takes place independently of physical co-presence, addressing the person by frequency modulation while enforcing the subjects' physical isolation, effects the becoming of crowds today. Following Spinoza, affects support or diminish the agency of bodies. Affect modulates a body's ability to relate and its spectrum of relationalities. The becoming of crowds used to rely on affective relations between physically co-present bodies; yet in the paradigm of digital connectivity, affect seems to have abandoned the necessity of physically-bodily co-presence.

Its translatability into computable vectors of individual control, deterritorialized by pulsed modulations of high frequencies, asks for a new investigation into the problem of the crowd. What is the effect of multiple physical-bodily co-presences in combination with individualizing mobile media circuits of affect? How can a highly individualizing media technology be turned into a crowd (war) machine? This text is my first exploration of such complex mobile media assemblages, whose functionalities install both harsh limits and new paths for collective enunciations as presented by the problem of the crowd.

My aim is to investigate if and how, 'post-media', a concept that Félix Guattari coined somewhere in the late 1970s after his Radio Alice pirate radio experiences, is applicable to the emergence of crowds in the age of ubiquitous mobile data. Guattari was rather optimistic in regard to new media constellations after or in parallel with the era of centralized mass media. In his intense search for devices that would help the individuated subject of enunciation to become a collective assemblage of enunciation with others, he regarded emerging media technologies, such as the Minitel in France, as at least promising candidates for "a site of desire driven by dissensus yet composing a collective diagram of commonalities" (Genosko 2013: 15). Post-media for Guattari, then incorporates the

possibilities for “innovative forms of dialogue and collective interactivity” that finally would lead to “[t]he multiplication to infinity of ‘existential operators’, permitting access to mutant creative universes” (Guattari 2009: 299). Post-media assemblages, in other words, can provide means for existential reconfigurations opening new universes of references for the affected subjects via dissensual collective problematizations.

Working with the notion of post-media today means to transpose and rework it into the contemporary media-technological situation. It is obvious that the pre-calculated pseudo-individual ‘choices’ that corporate social media or other sophisticated platforms offer, have nothing in common with Guattari’s post-media concept. The search for post-media devices for the production of collective assemblages of enunciation certainly has not become easier since ubiquitous mobile data connectivity and corporate data silos have inscribed themselves into the very core of contemporary post-fordist subjectivities, as instigators of a governmental soft-imperative of participation (cf. Wiedemann 2011; Bröckling et al. 2011).

But as I will show, a new perspective, a decentering of perspectives, becomes possible once different components of the mobile phone infrastructure are taken into account, such as the frequency modulation components, and conceptually understood as possible post-media devices. While this certainly seems to be an odd change of view of mobile phones and their infrastructures, it nonetheless follows the idea that an escape, a *line of flight*, in Guattari’s terminology, from the perpetual over-coding of desire by the capitalist production of subjectivity, involves a destabilization of the dominant signifying regimes that capture affect for algorithmic modulations.

## THE TRANSFORMATION OF PROTEST CROWDS INTO MEDIA ASSEMBLAGES: PROTEST CULTURES BETWEEN CONJUNCTION AND CONNECTION

Much has already been written about the new protest cultures that are saturated with digital and mobile communication technologies and how these are changing the very nature of activism and protests (cf. Dencik/Leistert 2015; Milan 2015; Renzi 2015; specifically for mobile phones and protest cf. Leistert 2013). New temporalities, modes and models of protest and its (non-)organizational structures have emerged, intensifying the crisis of the old institutional models and producing tensions with those of established large social movements. This culture of *new new* media activism has embraced networked mobile digital devices

without hesitation. It has integrated all kinds of digital tools into its workshop arsenal and employs the vast corporate database empires it relies on as scattered, voluminous containers, to be filled with all kinds of jabber, desires and aspirations. In addition, this new mobile media protest culture frequently occupies central urban plazas, thereby temporarily overthrowing the order of consumerism and installing a new public.

This around-the-clock, week-long presence of thousands of protesters on the occupied squares show and emblemize their societal situation of joblessness or precariousness and their yearning for a new collectivity. Nonetheless, such enduring presences of large crowds in urban centers, not long ago an exceptional situation for most European cities, soon lost their evening TV news-value and were degraded into just another snapshot of young people without jobs.

This recurrent attraction of central squares for these new protest cultures indicates that at their dissensual core, they are very much imbued by a rather traditional political imaginary, which materializes through its traditional concept of hierarchic territories: to seek out the central squares as incubators of (non-/anti-) politics echoes a modern idea of power as locatable and centralized. This locational expression of modernity manifested itself at many recent and enduring protests in Europe and North America.

Such a choice of territorialization stands in odd contrast to a second emblem of the new protest cultures: the negation of representation, or at least a tremendous doubt, and often refusal of the installed representational or authoritarian regimes along with their configuration of discourses.

It is interesting to look at these two elements combined – the magnetism of central urban squares and the denial of the classical modern model of representation – because together they mirror the current and devastating conditions of habitat and the miserable and demeaning quality of political discourse for the population: while it has become altogether impossible for most younger individuals to live in centrally-located (shared) flats, the hegemonic discourse distributed permanently through all media channels has nothing to offer but the old zombie tales of happiness through consumption and thus continues to poison and alienate language, perception and empathy. In short, it cuts the young people off from pragmatic experiments of collective enunciations.

In this sense, the agglomeration of bodies – sitting, singing, lying, sleeping, moving and slacking on central urban places, while they shuffle data around the globe with wiping digit gestures – echoes a desire to escape the confinements of solitary apartments and mini-flats in the urban outskirts, and become re-affected by the proximity and intensity of a public multiplicity. At the same time, the dominant signifying regimes that adhere to the capitalist mode of semiotization –

naturalizing capitalism's hold over life – have lost their addressees. One could say that the newly-built territory (square) is primarily constituted by an inversion of quality and quantity: the production of a new space, made of and for proximate bodies and affective resonance, overcomes the scarcity of inhabitable room, imposed by capitalist gentrification and displacement, while a language that is able to resonate with the emerging collectivity of bodies, that invites new experimental modes of expression, such as collective polymodal uttering, begins to be pragmatically invented within the duration of the protest.

## BODILY CONJUNCTION VERSUS BODILY CONNECTION

Guattari relates the emergence of the body to the possibility of a process of singularization:

“When the body emerges as such [...] it's because we find ourselves at a certain cross-roads of articulation between, on the one hand, assemblages that are potentially productive of a singular possible and, on the other hand, social assemblages, collective facilities that expect a certain normalizing adaptation.” (Guattari/Rolnik 2008: 409–410)

The emergence and endurance of unordered bodies thus correlates with an oscillation, a shift from ordered, structured and normalized signifying semiologies to a-signifying semiotics. ‘A-signifying semiotics’ is the most radical element of Guattari's reconception of semiotics (cf. 2013), since it “works flush with the real” and has “direct purchase on the continuum of material flows in the purport” (Bosteels 2001: 899). Because they (re-)open the possibility of new diagrammatic pathways for an encoding and decoding of the material flux, they are strategic elements for the machinic production of new universes of reference and their articulation within collective assemblages of enunciation. During such processes, individuated subjects delocalize and deprivatize, while at the same time, deterritorialize into new machinic conjunctions which construct new modes of sensibility and relation to the other through problematic interactions and changes in perception, expression (e.g. polyvocality, gestures) and affect.

The important operator at work in such a cycle of transformation is *conjunctive*. Conjunctions of abstract machines and material fluxes free and singularize the production of desire from the tyranny of the signifiers, from the rule of the law, from “national, familial, personal, racial, humanist, and transcendent values” (Genosko 2002: 170).

While a conjunction provides lines of flight from the representational regimes of signification and self-identification through new diagrammatic pathways, a different operator is at work in contemporary media-technological environments by default - *connectivity* along with its governmentally linked companion *participation*. This powerful duo has brought the subjectivities of self-governance to an unforeseen level of productivity and established a frame of reference. Functionally integrating networked devices in the subjectivities' milieu, that continually produce, monitor and replay a quasi unalterable feed of pseudo-individual intensities (affects) and their modulations, connectivity has become the main modal operator of self-identification and capitalism's production of subjectivity. Invested with captures of affect through current media-technologies, connectivity organizes a discrete continuum of redundancies with small deviations that calibrate such subjectivity according to the empty networked world time of flat infinity, while it strategically mobilizes its creativity and self-control for capitalist modes of exploitation (cf. Lazzarato 2014).

By constantly producing affective intensities, delivered from a physically-absent social network, connectivity effectively *splits the physical and bodily universes of individuals*. Connectivity, as continued and productive sociality, dislocates the individual from its physicality, which now turns into a reservoir of tensions rather than a foundation. The new milieu of body and dislocated, algorithmically-processed, but connected sociality subdues the physical proximities of the body as an impossible, incompatible alterity. The body becomes quasi absent from its physical locality and proximities as its affection is organized by packets of data that are wireless, hidden and ephemeral. The physicality of the body and its conjunctive capacity is hereby depreciated and degraded. This split of the body, as I call it, is a pragmatic solution on the conceptual level for the description of a body that is situated locally in the physical sense, but claimed socially through affect modulation by a mobile device. Tensions occur because the body has to negotiate two distinct temporalities and two distinct kinds of durations, one as a body within its local milieu, and one as a body within its networked milieu.

## **FROM FREQUENCY MODULATION TO DISSENSUAL POST-MEDIA ASSEMBLAGES**

This unprecedented roll-out of technologies of affective capture and modulation rests on a combination of cellular and wired networking infrastructure that manages the populations' connectivity – its sensing and probing. In Europe today,

wireless communication infrastructures cover most of the urban and suburban terrain, effectively becoming environmental to city dwellers, and sinking into the collective unconscious.

But ubiquitous mobile data connectivity for the masses had to be engineered and designed under complex and demanding conditions of frequency scarcity and heavy competition. The 1<sup>st</sup> and 2<sup>nd</sup> generation mobile telephony standards offered far too slow and not enough mobile data connectivity for the deterritorializing forces of neoliberalism's restructuring of capital accumulation. The 3<sup>rd</sup> generation of mobile telephony standards, such as UMTS, flushed open the gates to total connectivity for the individualized mass and thus supported and brought new powers to the fully pseudo-individuated production of contemporary subjectivity, a kind of mass template individualization.

The engineering task to provide data rates which would allow for an affect modulation of as many bodies as simultaneously present within the range of the cell, was solved via a micro-fragmentation of the signal on the level of two orders: time division and code division. By combining these channel access methods into the Time Division Code Division Multiple Access (TD-CDMA) method, essentially two things happen: within increments of 5 MHz (spread spectrum, code division) a radio frame with a duration of 10 milliseconds is divided into 15 time slots (time division, 1500 per second) (cf. Forkel/Jin 2002).

Code division offers temporarily predetermined slices of frequency to each receiving body: an operation of allocation by division. It basically allocates pockets for temporary use within the frequencies of UMTS. Time division further folds and discriminates the signal, allowing multiple passageways for affective transportation within bursts of 10 milliseconds divided by 15 slots.

A UMTS connection therefore oscillates within the range of 5 MHz and modulates time down to steady units of 10 milliseconds, offering 15 slots. This is one of the ontological foundations for the affective mobilization of the individually discriminated population. Bursts of 10 milliseconds divided by 15 within a range of 5 MHz are its material-energetic layer and thus its 'onto-pacer'.

This hyper-nervous electromagnetic signal pulsating far beyond human capacities to register, has become the carrier system for large parts of today's sociality. Whatever other layers or protocols it modulates with, it does so within an extraordinarily fast and jumpy time-frame. In addition, all of this perfectly synchronized and coordinated time and code shifting is happening at a frequency rate around 1900 MHz and 2100 MHz.

Such electromagnetic manipulations, where "[s]ignal is energetic and its force and matter persist outside our attempts to encode and decode it" (Munster 2014: 154) effectively provide "the nexus between a-signifying and signifying

flows in contemporary regimes governed by real time media”, as Anna Munster (ibid.: 158) suggests, following Maurizio Lazzarato’s philosophy of the video signal (cf. Lazzarato 2002). Indeed, the signaletic qualities of wireless transmissions offer a bridge between different regimes of a-signifying and signifying processes.

“The difference between a signal, a hormonal signal for example, and a linguistic sign, lies in the fact that the former produces no signification, engenders no stable system of redundancy that would make it possible for anyone to see it as identical to any representation.” (Guattari 1984: 167)

Accordingly, Munster proposes to focus on transmateriality as “matter in movement, matter as relations of forces, matter as an energetics” (2014: 158) to understand the technological modulation of time as an unbecoming of time (cf. ibid.: 160) while it entails possibilities for modulations that are “aesthetico-political and offer new possibilities for the signaletic” (ibid.: 160). Referring to Gilbert Simondon, Munster sketches transmateriality as “a metastable process that ontogenetically precedes a given material individuation. It denotes the potential to become some individuated material as a result of differentiation transforming this potentiality in the direction of a structuration” (ibid.: 159). And further: “Transmaterial relations, then, are both the metastable, virtual ones of pure difference and the processual actualising ones of a singular materiality assembling” (ibid.: 159).

Taking up this proposal and applying it to the electromagnetic UMTS mobile phone signals that permeate protest crowds, the full spectrum of de- and reterritorializing processes which control the becoming of crowds and their disintegration into individualized subjects, becomes perceivable, because the subject “in contact with desiring machines in a-signifying semiotics oscillates between reterritorializations on signification and deterritorializations into new machinic conjunctions” (Genosko 2002: 171).

In other words: by situating signaletic energies as ontological relation from which processes of individuation (Simondon) or machinic conjunctions (Guattari) actualize, the problem of signification semiotic regimes presents itself only as a *particular phasing* of the material-energetic modulations, calling into question what other phasings the modulation virtually entails and what is needed to bring them into actualization. Situating signifying semiotical processes as particular phasings of a larger repertoire of a-signifying and signifying regimes, whereby each establishes circuits between the actual possibilities, the actual real, the virtual possibilities and the virtual real (depending on the degrees of machin-

ic integration) shows how the becoming of crowds as an a-signifying deterritorialization process *and* processes of capture and control provided by signifying semiotic registers of messaging, *together* belong to a dissensual post-media assemblage. As a precarious and unstable multiplicity of actual and virtual functions, the tensions within such an assemblage are becoming apparent only after actualization, or rephasing.

Inseparable from these couplings and decouplings within post-media assemblages of protest crowds and mobile phones, are affective pathways of bodily resonances, to which I turn now.

## AFFECT AS HETEROGENESIS AND SOCIAL SERIALIZATION

So far, I have only vaguely indicated the concept of affect used here. In order to connect the becoming of crowds with the ultra-fast modulated material energetic layers of mobile data connectivity, the concept of affect needs some clarification.

From Spinoza (2002) to Gilles Deleuze (1990), from William James (1884) to Brian Massumi (2002), affect is characterized as an intensity relating to bodily activities in movement that register in pre-individual strata, whereas emotion is delegated to the reflexivity of individualized subjects. Advocates of the affective turn, such as Patricia Clough, tend to install affect as the base of all sociality: “sociality is a matter of affective transmissions across bodies in a machinic assemblage with technology and technical arrangements” (2010: 225).

This resonates with Guattari, for whom “[a]ffect is thus essentially a pre-personal category, installed ‘before’ the circumscription of identities, and manifested by unlocatable transferences, unlocatable with regard to their origin as well as with regard to their destination” (1996: 158). The power of this category resides in its “process of existential appropriation through the continual creation of heterogeneous durations of being” (ibid.: 159) and thus “is an instance of the engendering of the complex, a processuality in the throes of birth, a place for mutational becomings”, arising “from intensive and intentional categories, which correspond to an existential self-positioning” (ibid.: 160). Clough suggests that the “temporality of affect is to be understood in terms of thresholds, bifurcation, and emergence” (Clough 2009: 50), invoking rhetorics from complexity theory, another link to Guattari’s conceptual language.

But Guattari, who developed his concepts and theories vis-à-vis his clinical and political activities, distinguishes affects according to their onto-relationality: sensory affects may effect feelings of being, whereas problematic affects effect active ways of being (cf. Guattari 1996: 167). In addition, “affect is not a mas-

sively elementary energy but the deterritorialized matter of enunciation” (ibid.: 174). By subsuming affect into his modes of enunciation, Guattari can provide a scheme of affect functors that operates “just as well in the sense of an individuation as of a social serialization” (ibid.: 174). He proposes the concept of the *ritornello* as mediator of affect, working as

“[...] reiterative discursive sequences that are closed in upon themselves and whose function is an extrinsic catalyzing of existential affects. *Ritornellos* can find substance in rhythmic and plastic forms, in prosodic segments, in facial traits, in the emblems of recognition, in leitmotifs, signatures, proper names or their invocational between equivalents.” (ibid.: 162)

As the list of substantiations shows, for Guattari, affect as pure intensity, a common phrase used by protagonists of the affective turn, would be beyond the scope of his pragmatism. Affect needs mediation (or it remains “proto-enunciation” (ibid.: 166) and depending on the kind of mediation it may effect radically different enunciations. *Ritornellos* mediate affects: problematic affects adhere to content *ritornellos* (relating enunciation and the form of the content), whereas sensory affects adhere to *ritornellos* of expression (relating enunciation and the form of the expression).<sup>2</sup> Guattari thus manages to deploy a pragmatic rather than speculative use of the problem of affect. I will return to this pragmatics at the end when I try to show how crowd becomings and mobile phone signals can be described as alterations within different fields of enunciations. But to get there, the problem of the crowd needs to be addressed.

## THE PRECARIOUS ONTOGENESIS OF THE CROWD AND ITS ACCOUNTS

By turning to the problem of the crowd, the first step is to conceptualize crowds as situated, historically and locally specific and ontologically unstable. Thus, the works of Le Bon (2001), Canetti (1981), or Tarde (1903), which come to mind first, have little to offer in terms of an analysis of contemporary crowds (cf. Kølvråa 2015). To regain insights from their accounts, one would first have to disassemble, deconstruct and subtract the many layers of bourgeois resentments against the imagined destabilizing forces of crowds they are impregnated with.

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2 Indeed, Guattari's deployment of affect is much more complex than it can be sketched here (cf. Guattari 1996).

Becoming crowd, the machinic singularization as conjunctions of bodies that develop their own temporalities, durations, rhythms and so forth, relate to these classic descriptions of crowds (whether openly pejorative as with Le Bon, esoteric as with Tarde, or agonizing as with Canetti) much like early ethnographic descriptions to their other (the primitive). It is the same cosmological and ontological disjunction between researcher and researched.

Much the same applies to contemporary descriptions of crowds in social psychology. Of course, “[t]he energy of the crowd invests it with a transformatory potential” (Reicher 2001: 213). But to model a crowd by proposing that “crowd members seek to construe a contextual identity by reference to and within the limits set by the superordinate categorical identity” (ibid.: 195) only shows the continuing modernist fixation on identity in this discourse, which necessarily leads to the fatal misconception of crowds as made up by crowd members that are occupied with identity formation. Quite the contrary, the crowd is naturally indiscriminate. Bodies of a crowd, as seen from the outside, constitute it, but they are undergoing an ontogenetic process of becoming, that precisely subtracts identity and self-reference from them.

Christian Borch investigates the precarious state of the crowd within sociology and seeks “to trace the evolution of sociological crowd semantics” (ibid.: 4). He argues that a problematization of crowds is “essentially a problematization of modern society and its social and political set-up” (ibid.: 15). Thus, he investigates, amongst other themes, how the problem of the crowd has been instrumental in designating disciplinary boundaries between sociology and psychology, or as a means “to define proper approaches, methodologies, conceptual frameworks, etc. within sociology” (ibid.: 300). The crowd thus served as a medium and mirror for the constitution and development of sociology. I would add that, given the crowd’s dynamics and ontological finitude, it has a tendency to escape all Western modes of thought that ground themselves in stasis and being, and thus the crowd consequently must remain at the margins of analysis.

In more general terms, which suffice for the portrait presented here, it is enough to understand that if bodies are socially and culturally produced, and if media-technologies play a key part in their formation, crowds, too, are subjected to socially and culturally-specific historical structuration.

In addition, as the ontogenetic principle of a crowd’s becoming is relational, they offer varying vectors for capture, colonization and serialization, provided by their historical milieus. Fascism, to name just one example, learned to serialize crowds into disciplined masses of bodies without triggering their refragmentation into individuals.

The capture of the war machine by the state, in many ways resembles this process on a larger scale (cf. Deleuze/Guattari 1987: 351-422).

The becoming crowd unfolds on a spatial plane, which it tries to colonize (square) as milieu. It relies on affective modulations with and within its environment through a multitude of perceptive pathways. Crowds resonate within their environmental conditions which are never under the control of the crowd, forcing the crowd to continually reinvent their becoming according to environmental factors. For example, darkness at night affects a crowd in its becoming, because it diminishes the visual as the primary affective gate to the body, while it increases affective capacities of spatial hearing. A crowd in open daylight is exposed to the individualizing visual senses that infer a separate tendency from their continuous rendering of discrete objects. If, on the other hand, it is spatial hearing that leads the orientation, a continuous multiplicity of sounds and echoes enforces a process of singularization.

The problem of the visual for crowds is common knowledge and led to the invention of strategic devices to mitigate it. Amongst such devices are the Black Bloc's monochromatism which weakens identificational trajectories. This is not only a strategy to decrease identification by police. It serves the becoming crowd fundamentally by weakening capacities to visually discriminate altogether.

Many more such devices have been invented, ranging from strategic applications of sound and music, to the emergence of bodily movements freed from individualized pacing. Alterations in the body's chemical composition show that a crowd's becoming takes place even on the molecular level of neurotransmitters such as serotonin and dopamine.

Since temporal and rhythmic alterations are amongst the most powerful relational affective registers for crowds, the most common means to bring about the death of a crowd is to withdraw its access to the temporal or to movement in general. Within an instant, a crowd falls apart if it is submitted to a standstill from outside, as crowd control police knows very well. But it would be wrong to infer from this a shortcoming or weakness of the crowd.

Crowds, as opposed to individuals, assume their finite nature and thus increase the value of their becoming (cf. Guattari/Rolnik 2008: 430). Their capacity to disintegrate under hostile environmental conditions is their necessary condition to become again, but of course differently, since each becoming is singular.

Unstable and precarious processes of crowd becoming hint towards the ethics of crowds, one that the individual occupied by capitalist subjectivity lacks, since death is barred within the void of self-referential identities. By producing temporalities that are intrinsically linked to its becoming and occupying bodily

conjunct territories as milieus, the deadly passage towards transcendental references is blocked. The crowd has established “devices that can articulate living processes” (ibid.: 216) from within, including its own universe of reference.

## **THE PHASE-SHIFTING VECTORS OF MOBILE PHONES: A SCENARIO**

As I have outlined, current protest cultures have embraced the governmental assemblages of connectivity and participation, manifested in a split of bodily presence: digital networking organizes and modulates bodily affect from a distance while the physical-bodily presence depends on its surrounding and proximate milieu. As such, mobile phone use is the antidote of crowds: it addresses the individual and thus reinvokes it each time it interferes with the development of dispersed, but resonating bodily temporalities and movements, and finally, with collective assemblages of enunciation. In the context of crowds, mobile phones are first of all a disruptive vector, interfering with the powers and on the level of individualizing affects and semiotic regimes of subjugation.

But it would be wrong to understand this as a necessarily total rupture. Three considerations have to be taken into account here: in contrast to a forced standstill, as executed by the police, such an interference is soft and it retains a degree of openness towards a-signifying processes. Second, critical data that ultimately may prolong the becoming of crowd can inform it through messaging channels. And third, the signifying phase of mobile devices is only one of many phases that such high-frequency modulation constantly emits into the environment. The a-signifying matter-energy modulation itself needs to be accounted for in this context as a nexus of machinic assemblages. To illustrate all three considerations, what follows is an example of a very common situation for protest crowds, from where each consideration becomes clear.

In this scenario, all of a sudden a mass sending of text messages to the crowd begins, that provides logistical information. This sending has to actualize the relay of individual “nodes”, and in this very moment, the affective distributions of the crowd are reorganizing themselves. They organize according to a split of the body into a bodily-message-receiving milieu and physical-bodily remnant of proximity on which the relational ontogenesis of the crowd continues to depend. But before the reading of the message finalizes the individual’s actualization, it is the phone that articulates its presence through vibrations or sounds. So, first, the crowd vibrates and rings within a small time-frame that, transposed onto the spatial dimensions of the crowd, jumps from here to there within the occupied

space. The signalling is distributed within the spatial plane of the crowd and actualizes the individuals non-synchronously, because each phone receives the message slightly de-phased in relation to any other. The interfering vector does not attack the crowd at once, but only segments or dispersed, physically unordered blocks, patches. The becoming of crowd thus continues as such, but it has to endure local conflicts between the two affective orderings of connection and conjunction that are signalled through ring tones or vibration. But there is more to this signalling phase: in the course of locally jumping signalling within the crowd, the redundancy of the message is expressed. This in itself informs the becoming of the crowd, since the signal can be ignored by large blocks of the crowd without any loss of information.

Second, how much bodily split is effectuated by the phone's intervention? Effectively, not much consciousness is needed for building a path between a device and the eyes, rather non-conscious bodily gestures, such as setting up the device for use. Thus, plenty of local phone-body machinic assemblages emerge within the crowd.

The next bit of the signalling path is complicated for the crowd: the message has to be read, which means a completely different register, one of semiotic signification, is invoked. Such an invocation and its outcome highly depends on the message received. In the context of this scenario, the message contains traffic information, relating to activities by the police who are installing a capturing blockade ahead of the crowd. This is a message of ultra affective intensity in such a situation and since its value is intrinsically linked to the physical-bodily other of the split body, it translates from connection to conjunction within instance. The invocation of the semiotic registers can resonate intensively with the a-signifying machinic singularization of the crowd. Or, put otherwise, the crowd's information by the message, in Simondon's sense, actualizes its individuation, and without further hesitation, the crowd knows in which direction to proceed (cf. Simondon 2007). Once a critical saturation of this affection within the crowd has been reached, this mutual, common knowledge can not be separated from action anymore, it invokes a new ontogenetical structuration of the crowd. The crowd has been altered in that this information is now redirecting the crowd. The message received was in its fullest sense a proceed signal, not a stop signal.

Finally, the signalling path of matter-energy modulation in high frequencies not only provides this particular phasing of semiotic signification, but is comprised of bursts of milliseconds jumping within a code-controlled oscillation range. This means that each mobile device's signal path is de-phased in relation to the path of every other mobile device addressed by the cell. The matter-energy

modulation at one moment thus may contain hundreds, if not thousands, of phase shifts and time bursts that ontologically integrate into the assemblage of crowd and phones, as expressed by a de-phased and locally unordered ringing and vibrating. The infra-allocation of one phase for each individual signal corresponds to the inference caused by each signal within the crowd. And the signal stream in its totality that emanates from the cell tower, turns into a multiplicity of redundancies. This stream depends on the powers of at least 3<sup>rd</sup> generation mobile networking technologies, as I have explained above. By solving the addressability of crowds with multiple time-shifting bursts, *connectivity regains conjunctive qualities*. This is most certainly news to the telecom providers.

## CONCLUSION: MOBILES AND CROWDS AS POST-MEDIA ASSEMBLAGES

If “post-media emphasize the modular and open process of the production of subjectivity at the heart of each media-inflected process” (Brunner/Nigro/Raunig 2013: 13), it is important to consider the whole spectrum that is at work in such a process. If semiotic signification is separated from the flux of other semiotics, as so forcefully and repeatedly criticized by Guattari (cf. Guattari 2013), machinic becoming oscillates towards re-serialization. I have shown that only if the complete multi-phased material-energetic modulation of UMTS is made explicit *and* its operative functors within the assemblage of crowds and mobile devices as a redundancy of locally shifting signalling paths shown, it is only then that an individualizing media technology such as mobile devices, may itself transform into a tool to prolong the alterity of the crowd, supporting conjunctions.

For Guattari “the shift from mass into post-media would not be sequential and definitive but coexistent, contestatory, and messy” (Genosko 2013: 15). Yet, there is more to it, if we want to use the notion of post-media: this contribution situates this shift along the axis of individualizing media technologies and shows how co-existent the problem of post-media remains in a post-mass media assemblage. But if media here relates to “the production of a completely different middle”, one that “take[s] part in the production of sociality and become in a new sense *social media*” (Raunig 2012: n. pag.), it is because the bodily split enforced by mobile data connectivity becomes transformed into conjunctive multiple bodily processes. Such a performative agency adheres to the transformative powers of becoming crowd while successfully integrating the powers of mobile data connectivity. This coupling of two predominantly distinct ontological spheres exhibits a performativity that spans from the high frequency modulation

of digital signals to the indiscriminable multiple bodies of the crowd. To show the performativity of this post-media assemblage with its two modal operators, connection and conjunction, it was necessary to interrogate the media technology in operation, down to its material-energetic layer. Each media technology operates under specific time modulations (cf. Ernst 2013) and each wireless media technology provides specific modes of frequency distribution which have critical effects on machinic becomings and singularizations, such as the problem of the crowd.

In addition, a more comprehensive account of effecting vectors safeguards the analysis from a blunt speculative thrust. Such a speculative programmatic, as provided by Nigel Thrift (2008), or partly by Clough, which indeed helps to map the conceptual landscape of affect studies, often has an open flank towards, if not mysticism, then at least analytical opacity. Or, to put it otherwise: the “what it effects” question, which was necessary to establish affect as a promising and challenging theoretical horizon and tool, needs to be supplemented with the question of “how it effects”—just like semiotic signification must be extended towards a-signifying semiotics to sense its potentials.

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