

Bio-image and general intellect: Can images transform bodies?

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In spring 2011, hundreds of migrants arriving from revolutionary Tunisia to Paris opened a harsh conflict within the metropolis, reclaiming the right to circulate freely, and the right to have rights. In November 2011, the Central Tunisian Bank decides to state explicitly its independency in the law text which concerns public powers. “If we do nothing, it simply becomes the death of revolution”, a Tunisian comrade says.

But beyond the catastrophe, the ‘Occupy’ global movement - starting from revolutions in Maghreb and Mashrek, until Spanish *acampadas*, and all the occupations that are taking place all over the world, teach us that we experience a new temporality: the temporality of crisis and the temporality of a global becoming. How do the ‘occupy-bodies’ struggle against their *financial captation*, and transform singular micro-politics of resistance in a common power to act against it? How do they reappropriate, *through bodies and images*, their wealth and potency, and that, produced, generated, created by bodies, from within, but against financial capitalism? As an example, the concentration of economic, political and media powers in the hands of one single man has determined, in Italy, a homologation of modes of subjectification and constitutes an anomaly of violence: it has normalized the social body, and fragmented it, in order to control it. It is therefore necessary to develop our understanding of how images have performed, during the last thirty years, this *in-formation* of bodies. There seems to be a specific mode through which one builds his or her body, a mode determined by an extreme power of normativity and, on the contrary, there seems to be also, coming from below, an empowering capacity of subjective and collective constitution. At the horizon, there is the necessity to reappropriate our lives, our bodies, through the reappropriation of our common wealth.

I would like here to draw just one line in the midst of the multitudinary network of resistances to financial appropriation of the material and immaterial wealth that we are producing. At this purpose, I will show two examples of generation of life through images, beyond the opposition between the notions of production and that of creation, on the basis of some distinctions between these two concepts. What I would like to concentrate on, is to understand how to evade the financial captation of our immaterial wealth – what constantly results from our creation and our potency – building new powerful relations between images and bodies.

Karl Marx called ‘general intellect’, in the “Fragment on Machines”, widespread social knowledge that capital exploits especially for the purposes of its technological development [1]. Paolo Virno writes, in regard to the Postfordist mode

of production, that living labor “embodies the general intellect” or “social brain”, and this “social brain” is no longer embedded in machines, and no longer coincides with the fixed capital, but rather coincides with the *linguistic cooperation of a multitude of living subjects*:

“In Postfordism, conceptual and logical schema play a decisive role and cannot be reduced to fixed capital in so far as they are inseparable from the interaction of a plurality of living subjects. The ‘general intellect’ includes formal and informal knowledge, imagination, ethical tendencies, mentalities and ‘language games’. Thoughts and discourses function in themselves as productive ‘machines’ in contemporary labor and do not need to take on a mechanical body or an electronic soul. The matrix of conflict and the condition for small and great ‘disorders under the sky’ must be seen in the progressive rupture between general intellect and fixed capital that occurs in this process of redistribution of the former within living labor” [2].

Today, financial capitalism infinitely regenerates itself by itself, and it does so, not only by the means of languages, but also by the means of knowledge, and the movement of life and images. This means, that there is a performative injunction to biological regeneration of servitude. Bodies are morphologically shaped by capital, which reproduces itself, by means of the flesh. It works through an infinite biological reproducibility of body-images. What, then, are the possible strategies that a body can implement, in order to destroy from within its *visual performative injunction to reproduce its own enslavement? Embodied images* are devices of financial power, but they can also be empowering for bodies, when they are free. What are the images that destroy from within the bonds of capitalist appropriation? How to tear off the devices and media images that are embedded (incorporated, prosthetized) in our bodies?

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1. From the infinite technical reproducibility of images to their infinite biological reproducibility

Just like languages, images “generate conscious movements, or social automatisms, or political systems”, to say it with Franco Berardi and Alessandro Sarti [3]. Images build the visible, like biotechnologies build living organisms. Images generate forms in continuity with the living, of which they are visible and material extensions, because “nothing is representative, but all is life and processes of becoming”, with Deleuze’s words. If words, discourses and narratives are performative (they act), images are performative in the sense that they can change the real. Our hypothesis is that, beginning from the 1950s, global mediatic system works in an self-referential and autopoietic way, using recursively the image that it has of itself. This system does more than just reproducing bodies as if they were things – through technical and technological reproduction of images –, but it reproduces itself by itself, it regenerates itself, just like a living body. In fact, that of images is not only an ‘inert’ platform – paper, screen, pixel – but a living support: bodies are employed as the platforms of reproduction; in particular, women’s bodies, migrant’s bodies and marginal bodies.

- **A technobiological dynamics.** If we consider the important fact of technical reproducibility of images – analyzed at the beginning of last century by Walter Benjamin [4] –, we experience, since the 50s, the passage from the infinite technical reproducibility of images to their infinite biological reproducibility. The invention of *bio-imaging*, in that period, is paradigmatic.

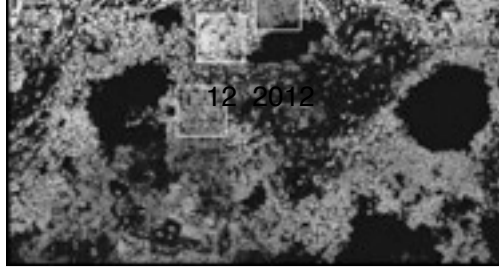


Fig. 1- "In the magnified breast tissue above, cancer cells appear lighter. From confocal microscopy of small regions (boxes) the daVinci program constructs images of individual cell nuclei like those at very top; specific genes are labeled with fluorescent probes". (« Seeing the cell nucleus in 3-D », *Berkeley Lab Research Review*, <http://www.lbl.gov/Science-Articles/Research-Review/Magazine/2000/Winter/features/01seeing.html>.)

Images become devices of capture of the living, but also devices of production and reproduction of life itself, of bios. This is not only a question of change/crisis of modern monetary, economical and cultural parameters. These allowed nation-states to control populations over the production of bodies and images, on the behalf of political and aesthetic representation. We are talking about a more profound dimension, which is the radical change occurred in the form of valorization of images and bodies, as well as a radical change of the exploitation devices, in which consisted modern representation (as Diego Velázquez has taught our eyes in the XVII century).

The economic exploitation of man by man will the more and more be exerted through media in what can be considered as the beginning of Postfordism [5]. The new dynamics can be qualified as techno-biological, and it articulates the capitalist need of reproducing and extending itself through bodies, embedding slavery in each of them. Exploiting the regenerative and reproductive attitude of life – living, carnal, affective labor –, cognitive capitalism transforms bodies from within, from their substance.

- **From production to creation of bodies and images.** In the 1960s, we can see that a change occurs in the modes by which powers are exerted, in the government of bodies. We pass from disciplinary societies to control societies: societies in which individuals are the more and more controlled by within their imaginaries and their practices of subjectification [6]. Visual norms of morphological conformation will start to build bodies, on the basis of the technological revolution articulated with – in a quasi simultaneous way – the mediatic import of a *Playboy* imaginary: a pornotopic imaginary [7].

Contemporarily, labor gradually feminizes. This means, that it acquires the same characteristics that have defined, historically, women's work: not recognized, unpaid work, variable, invisible work, black work, affective and sexual work [8]. Life put to work is what characterizes the regime of the infinite reproduction of slavery in the neoliberal rationality. We can easily notice that progressive feminization of work and slavery corresponds to a major function of capitalism, which is that of reproduction of work and slavery. We shall see some essential relations between capitalistic accumulation, technology, bodies at work and images, all centered on the notions of *reproduction, representation, and regeneration*. Some of these relations are clearly power relations, but we must not forget that in order for these powers to exist, they need the vital part they appropriate, that of bios, that of living and loving bodies that can, on the other side, extend their potency by splitting the chains of bio-economic slavery.

The articulation between these elements produces a global machine of visual control over bodies and of visual production of bodies. The new extraordinary visual machine has the power to transform the *facies* and the body of each individual through its gigantic productive eye. We have come to the specification and transformation of the real in a *hard-core real*: the complete mediatic exploitation of affects, of sexuality, of bodies, coupled with the progressively privatized political space, the more and more devoured by finance. What about this *visual production*? What difference is there between the

capitalistic bio-visual production and a common liberating bio-visual creation?

The concept of reproduction of body-images, as we will explain later, means that the phenomenon of the infinite technical reproducibility of images (highlighted by Walter Benjamin at the beginning of mass culture) starts to become, in the 50s – 60s, an infinite biological reproducibility of images, and an authoritarian injunction to biological reproduction and regeneration of bodies on the modes and to the purposes of the advanced capitalism. But what about the word ‘reproduction’? We must here make a distinction between two radically different modes of this function. Representation works as a bond with our bodies and it is performed through the violence of an infinite reproduction of separations, exclusions, as forms of control (bio-power). On the other side, the crisis of political representation takes form in the Occupy places throughout the world, as a desire of transformation, beyond the nation-state, and beyond its discourses. Here reproduction is not a repetition, it works against mimesis and against identification of subjects in fixed roles, as a living creation of life and of common political possibilities.

- **The bio-visual autopoiesis.** If words do things, images do things too: they transform bodies. During the last decades, the construction of a specific morphologically determined social body, serving the progressive process of capitalization of life crossed with feminization of work has worked out through a visual auto-reproduction: a *bio-visual autopoiesis* of the capital through bodies and images.

The autopoiesis is, in its simplest definition, the characteristic of a system which reproduces itself by itself, so as to maintain its structure even though its components change. Autopoietic systems, as described by Chilean cognitivists Humberto Maturana and Francisco Varela, “An autopoietic machine is a machine organized (defined as a unity) as a network of processes of production (transformation and destruction) of components which: (i) through their interactions and transformations continuously regenerate and realize the network of processes (relations) that produced them; and (ii) constitute it (the machine) as a concrete unity in space in which they (the components) exist by specifying the topological domain of its realization as such a network” [9].

It is an auto-referential system, a system capable of using recursively the image that it has of itself: it does not only reproduce bodies like things, but it reproduces, through biological reproduction of bodies, its own system, its own net.

Here stands the difference between two kinds of autopoiesis. From one side, capital reproduces itself mimetically, excluding any alterity by subsuming the whole real: it is the production and the visual reproduction (representative, repetitive, mimetic, schematic) of an auto-referential system based on financial criteria to measure life. It is the difference between the autopoiesis of the capital (the borders of the hegemonic network) and the creation of life. The first border (and order) is auto-produced today by the bonds of financial governance, extracting intelligence from bodies, and the infinite biological reproduction of life and images means immediately an infinite reproduction of debt over life. In fact, this mechanism plays within an eschatological temporality, based on indexes of prefiguration, processes of revelation, promises, a pre-visual (in a temporal sense) dimension based on temporal bets and financial speculations. On the contrary, the second kind of autopoiesis performs figurations, constantly creating itself, open: the word autopoiesis comes from the Greek *auto*, oneself, and *poiesis*, creation.

The global financial crisis that we are living in, since 2008, is also a crisis of the auto-reproductive and autopoietic mechanism of capital. The generalization of precariousness and poverty implies a lack of social, biological and creative reproduction. This is the contradiction of bio-economic and cognitive capitalism and here is the crisis: a crisis of the

capacity of capital to reproduce while it increases the exploitation of life.

2. Revealing/creating revolution

- **Forecast revelation.** In the substance and in the very way images are build there is something biological. Photographs are techno-biological devices: light is necessary to impress a form on a support, thanks to a bonding animal agent: an organic glue fixing light with silver. A photographic impression can last hours: it is life and time embedded in materiality. The organic molecules are spectral sensitizers. Starting from the invention of X rays, and then, bio-imaging technologies, light itself will be produced by technologies of visualization of the interior of a body - and not anymore only by exterior light capturing exterior forms. Images reveal the existent, and this process of revelation of life comes from below: an inside light coming from the interior of the bio-technological device, which is the latent image. Then, it is necessary to apply chemical processes of revelation (development, generation) to the film, to have a stable image.

Furthermore, with bio-imaging, starting from the 50s, if technique can intervene in the processes of biological generation through biogenetics, this seems to be a visual phenomenon. The recombinant model is a generative model that images and life have in common. Technique can interfere in the biogenesis using procedures, which have developed in the realm of images. In this sense, we can talk about some constants, in the biogenetic realm, ways of functioning through visual editing. Therefore, we can assume that, capitalistic autopoiesis (mimetic auto-reproduction) works through a specific biogenetic visual grammar. The possibility to describe biogenetic processes as visual processes becomes an epistemic premise of all the biotechnological developments. If, starting from the 1950, the analogy between information and life becomes the more and more frequent, why wouldn't we consider also the analogy between image and life? The biogenetic process would be the actualization of a code, the deployment of information in space and time, spread across a visual *revelation/detection* device or media support.

This *revelation or detection* device can be a biological body or an artificial body (as for machines like robots). Therefore, it seems to us necessary, considering the visual saturation of our era and starting from the developments in molecular biology, to point the necessity of explaining life as a visual phenomenon.

The semiotization of biological generation becomes a *biologization of images*, not only of language. From one side, informatic simulation of life needs its visual production. From the other, the very informational biogenesis is a generative process. Here are two different processes, whose node is the *re-production: a biological and visual phenomenon*, at the same time [10]. The production of genetic material is inoculated in living organisms: computer simulation intertwined with biological modeling shows that an image can generate and transform life. The morphogenetic bio-image is necessary to the synthetic bio-morphogenesis [11]. When visualizing 'biogenetic grammar', life appears as an editing of images, on the basis of a code. Mapping human genetic constitution means then, organizing a set of visual enunciations. The generative bio editing is made of a complex intertwining between language, images and bodies. Visual reproduction takes the form of biological generation. This visual reproduction, which is, at the same time, biological generation, is produced by the creative potency of the general intellect and then captured by the systems of financial valorization, expropriated for the regeneration and reproduction of the capital itself, infinitely. Our point is, therefore, to understand how to reappropriate our bio-visual generation, against the perverse performative capitalist injunction to regenerate capital itself. In this scenario, revelations are continuously forecast by financial agencies: rating agencies continuously *forecast* waves of crisis and speculation, therefore, they *produce* debt and speculation over crisis. The technologies of forecast (global

machines of control such as Standard and Poor's and Fitch) induce waves, processes of accumulation, heterogeneous stratifications.

- Create revolution



Fig. 2- Anonymous, *A Young Tunisian Who Burned Himself*, 4 January 2011 – Sidi Bouzid, Tunisia



Fig. 3- Unknown, *Puerta del Sol - #SpanishRevolution*, 17-05-2011 - Madrid, Spain

If media images are also biological images, the technical automatism is articulated to an image, which can last a life, articulated with the deposit of time between an image and another, so as the deposits of biological substances and natural light on inorganic supports. These inorganic supports or inert material platforms use to work as a fixed capital in the industrial era that Marx describes (would it be in Duchamp, in photography or in cinema) separated from the variable capital that was the visible result of the image - the visible surface of revelation, coming from below. These elements are today articulated with life, as a permanent support, when the substance of an image is a body itself, as for Mohamed Bouazizi self-immolation anonymous photograph on the 4th, January 2011 [12].

An elliptic visual 'biopic', an image of a body captured in a state of transformation, and, in the other, an image of an insurreccional Plaza del Sol (Madrid, 15 may 2011). In a glance, appears, in our political eye, the image of a whole insurreccional generation: a technical body, an inert body, a material body, a revealing-collective body, the general intellect. The articulation of techno-political-mediatic aspects determine living effects which do not only 'give visibility', 'illuminate' the real, but who do create the real, against the financial forecasts (revelation as promise, eschatology, prevision). These images are biological because they are constituted and linked one to the other by the biological temporality of a common becoming, in the rapid lightning of the temporality of revolution. They articulate, therefore, biological revelations together with bio-imaging modes of production. No more inert supports as machines, but living platforms of bodies at work: this is the infinite biological reproducibility of images.

Revelation is something about newness, it is not the discovery of something which existed before and that was just

hidden under the surface, revelation is creation. Revelation of a body is, therefore, creation of a body: it is generation in the most creative sense of the notion.

The neoliberal mediatic-economic-political imperative of the infinite biological reproduction of servitude is a process centered on power of bonds over life, through embeddings of privacy, inertia, insensitiveness inoculated in bodies treated as financial platforms within corporations, and debt over life in its most carnal characteristics. Some biopolitical examples of images show how these very bio-images turn the necropolitical imperatives and the apocalyptic forecasts, and organize its vital elements in a common biopolitical creation of life.

3. The biopolitical image, between an already and a not yet



Fig. 4- Gustave Courbet (1819–1877), *The Wave*, 1866, Private collection. Oil on canvas, 52 x 79.5 cm.

The global movement goes forth. It is innovation and change of corporeal, spatial, material, epistemological dimensions, disproportionately, exceedingly. The global wave exceeds itself at the same time it rises, that is to say when it's here: the global wave is the restless, unquiet undulation of the autopoietic movement, that by which the subject builds itself, restlessly. If the wave breaks temporality between the eternal (what is « before » what is about to start) and innovation (what is 'after' what begins here), its material field consists in all the events that define it by transformation, that of the becoming-body of a multitude of monads of bio-images - the general intellect constituted by a multitude of single bodies.

All the events that build the multiple becoming-body constitute the material field of the bio-image, here and now. This field is the place in the image and the place of temporality where the body produces something, where the body materially produces its field in each singular body-predicate that innovate and create it, at the same time - the series of Courbet's Waves like the global wave of *occupyers*. It is a materialistic field, a resistance field between the body and the undulation of the process of knowledge, as the materiality of general intellect resists, while undulating: the bio-image has a corporeal intensity.

Here is the paradigm-virtue of resistance to fate and thus to the linear representation of time and corporeal homogeneity. It is this resistance to any transcendentalism and any predetermination, which is virtue, as an active constitution of the world. If this virtue comes from a will – a will to constitution – it asserts itself immediately as political, and its potency immediately becomes political power of transformation. The subjective and collective affirmation of potency implies an ethical, political and necessarily materialistic statement: the active transformation of substance, of flesh, of power relations, in the temporality of change - courageous openness to risk. Temporality is made an unquiet and restless praxis of Kairòs, which produces truth and subjectivities in the corporeal immersion [13].



Fig. 5- Aliaa Magda Elmahdy, Nude Art يراع نف

Photographic self-portrait published in her blog arebelsdiary.blogspot.fr, 23 October 2011.

Between Aliaa's body, who speaks and acts, and what her image says and acts, there is the same unquiet undulation defining the « here » in the field of knowledge and the « here » of the footstool, which is the co-production of this body, this epistemological field and the material footstool. It is the body that produces, as power of determination, the reflexivity of the globalized image as a material field of production, between an 'already' and a 'not yet': the difference is reflexive and fully active, generating disproportionately, but embodied. This is the ontological difference of temporality, the fact of being productive – of this singular body – from resistance to resistance, from body to body, from wave to wave, caught in the material and common field of their constitution: the praxis of time.

The genesis of this image, for the common of all the bodies, is that of expression and imagination, that is to say, a biopolitical image.

Footnotes

[1] Karl Marx, "Fragment on Machines" (1858), *Grundrisse* [Outlines], London, Penguin Books, 1974.

[2] Paolo Virno, "General intellect", in *Lessico Postfordista* [Postfordist vocabulary], Rome, Feltrinelli, 2001, translated by Arianna Bove. <http://www.generation-online.org/p/fpvirno10.htm>. I emphasize.

[3] See Franco Berardi, Alessandro Sarti, *Run Forme Vita Ricombinazione*, Mimesis, 2008.

[4] Walter Benjamin, The work of art in the age of mechanical reproduction, 1936. See <http://www.marxists.org/reference/subject/philosophy/works/ge/benjamin.htm>.

[5] See Christian Marazzi, *La place des chaussettes* [The place for the socks], Paris, Eds. de l'Éclat, (Trad. F. Rosso, A. Querrien), 1997.

[6] See Michael Hardt, "La société mondiale de contrôle" [The global society of control], in É. Alliez (dir.), *Gilles Deleuze: une vie philosophique* [Gilles Deleuze: a philosophical life], Paris, Les Empêcheurs de penser en rond, 1998, p. 359.

[7] As Beatriz Preciado calls it in *Beatriz Preciado, Pornotopie-Playboy et l'invention de la sexualité multimédias* [Pornotopy-Playboy and the invention of multimedia sexuality], Montpellier, Climats, 2011.

[8] See Cristina Morini, *Per amore o per forza: Femminilizzazione del lavoro e biopolitiche del corpo* [Out of love or by force: the feminization of labor and the biopolitics of the body], Verona, Ombre Corte, 2010.

[9] Humberto Maturana, Francisco Varela, *Autopoiesis and cognition. The realization of the living*, Dordrecht, Reidel, 1980, p. 78.

[10] Franco Berardi, Alessandro Sarti, *op. cit.*, p. 32.

[11] *Ibid.*, p. 32-33.

[12] Mohamed Bouazizi was a 28-year-old university student who burned himself alive when the Tunisian authorities confiscated the fruits and vegetables he was selling to feed his family.

[13] I am thinking on the wave of Antonio Negri's *Kairòs*, *Alma Venus, multitude*, translated by Judith Revel, Paris, Calmann-Lévy, 2001.