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Unraveling the contagion

Au Lecteur:

La sottise, l'erreur, le péché, la lésine.

Occupent nos esprits et travaillent nos corps,

Et nous alimentons nos aimables remords,

Comme les mendiants nourrissent leur vermine. [...]

[...]Serré, fourmillant, comme un million d'helminthes,

Dans nos cerveaux ribote un peuple de Démons,

Et, quand nous respirons, la Mort dans nous poumons

Descend, fleuve invisible, avec de sourdes plaintes. [...]

Baudelaire, Charles. *Au Lecteur*

Accomplices of Baudelaire, bodies resent their mistakes, their geographies are altered slowly, through the movement with which the social web pushes emotions as if heavy tectonic plates. Yet, only a quick reading to today's paper is needed to acknowledge that death does not descend as an invisible river, rather, it is the country's horizon. Today, as every other day, murders are reported, adding up to the

tragic count of violent deaths in Mexico; twenty-one more just yesterday.¹ The paper gives an account for the almost seventy deaths caused by the recent outbreak of influenza virus. The proximity of the two reports is an invitation to the grim calculation of the complete death toll, an operation to rationalize death and to neutralize its horrors, as we realize it is not our death and it is others’.

Before the impassive body, compassion is, either empty rethorics, or the first link in a chain of differences established by the living ones, through an elegiac discourse organizing the signs that must have belonged to the anonymous death when alive, in order to presume them delinquents, poor, ill, ignorant, or whatever is needed to explain why they are death, why they are different.

Such elegy is not written by the departed; rather it is narrated from power, which proudly parades, through it, both, the passion with which it has managed an internal war, and the heroism it showed in face of the epidemy. In short, power’s ability to widen the death horizon in Mexico, by means of the intensification of the differences between itself and the rest. The latter is presented as crime, hence stirring on fear, indifference, apathy and reluctance, to indefinitely postpone the achievement of desire.

Of the extensive becoming of germs and colonization.

In 1763, as Lord Jeffrey Amherst was developing a way to end the resistance offered by the natives of the Ohio Valley, he had an idea he communicated to colonel Henry Bouquet, chief of the army. The army then swiftly gave away the blankets used by the smallpox patients to the Indians, the disease spread amongst them and the resistance fade.²

Social Darwinism has explained the history of European colonization, from the XVI century until the XX, as a result of the evolutive differences between groups of humans that encounter at the racial superiority of some above others, the superiority of the vanquishers over the defeated. For that reason

¹ National news, *Al menos 21 asesinatos, saldo de la violencia en el país; en Chihuahua, 12.* (At least 21 murders, toll of violence in the country; 12 in Chihuahua) La Jornada, Sunday 17 of May 2009, Política, p.4

² Diamond, Jared. *Armas, gérmenes y acero.* Random House Mondadori, México, 2007, p. 230. The names of the characters were aquired from: http://rwor.org/a/v23/1120-29/1127/biowar_s.htm. 18 of May 2009.

biology is distrusted and labeled as racist, it tends to be avoided when understanding the differences imposed by the colonizational model. Biological racism is denied by postmodern culture, foreclosing it from its imaginary. But it does not eradicate it, biological racism floats on, as a warm and soft mist waiting the right moment to firestart the bones' marrow.

With this concern in mind, Jared Diamond writes the evolutive history of the human kind of the last thirteen thousand years,³ he gathers evidence from across diverse disciplines, and under whose light he examines the next chain of events: Man starts dispersing from Africa and eventually he colonizes the whole world, in several regions plants and animals start being domesticated, the first civilizations are born. At this point the domestication process, different from the taming process in animals, is not conditioned by the ability of humans, but rather by the natural environment. The variations in the weather of the continents are determined by their spatial orientation. The tribes that settled in the early Eurasian continent found themselves in a natural environment with a great number of domesticable animals. In a territory where the greater distance is set across from west to east, these groups shared a similar weather along this axis, which allowed for both the domestication practices and the species bred to be easily transmitted horizontally across the continent. From all the mammals seen as candidates to be domesticated, human kind has only achieved that enterprise successfully with fourteen species. Amongst those, only six have actually extended globally: sheep, goats, cows, swine, horses and dogs.⁴ All of them stemming from the strip of Mediterranean weather extending across Eurasia.

Just as the domesticated plants and animals had a wild ancestor, in the same way the germs behind the most terrible of epidemics in human history, such as smallpox, influenza, tuberculosis, malaria, pest, measles, and cholera, they all derive from ancestors who attacked, amongst many animals, those associated to the ones domesticated by man. The evolutive process, including the close interaction between the early domesticators and their animals, helped confine germs into the species that offers the greatest chance of survival, man.

³ Diamond, Jared. *Armas, gérmenes y acero*. Random House Mondadori, México 2007, 589p.

⁴ Diamond, Jared. Op cit. p. 186

The various rhythms, underlying in Braudel's Mediterranean historical trends, started Europe's colonial expansion process. In the victories of the conquering wars, started in Mesoamerica and the Andes and the extended to other continents, the germs carried by the conquerors were as efficient, in no more, than their weaponry and their culture.

Just as Don Quixote's wind vane, that was wider where it should have been thinner, such is Joaquín Torres García's compass. It reveals the principal axis of the American Continent vertically. Around it, the geography and the natural environment are shaped in such a way that allowed the first inhabitants to domesticate some plants and a few animal species, for example llamas, turkeys and dogs.

The majority of the wild vegetables, from which ours derive, present genomic variations from one region to another, indigenous mutations that help adapt plants to their environment. When plants are farmed, artificial selection introduces a series of transforming mutations, in this manner it is possible to examine the dispersion of a given crop to determine if all its varieties show the same indigenous and transforming mutations. With this information the point of origin of the species can be traced and also whether if it is only one, or if there are several of them. In Eurasia all species come from a common ancestor originated in the Fertile Crescent, while in America there are two sites where plants started being domesticated, Mesoamerica and South America. The tropical areas between these two sources of civilization prevented the exchange pre-colony.⁵ If crops were not extended, even less so were the newly domesticated animals.

Dogs are not exclusive to Mesoamerican cultures; they are present in virtually all the planet. It has been bred in China, Polynesia, Eurasia, etcetera. The result is a myriad of races designed for many and diverse purposes, such as sheperding, competition, or social control. In view of the extent of the variety, few would guess that the common ancestor to them all is the wolf. This animal, as its descendants, can be a carrier of rabies, and as a symbol of evil and menace it goes beyond the imaginary. From oral narrative to literature, from Michel Strogoff to modern black novels, where Marc Behm tells of the hell of the Nazi manipulation and its effects on young orphan Edmunda Sieglinda

⁵ Daimond, Jared. Op. cit. pp.208 y ss.

Kerr. She is transformed gradually in what seemed despicable. Once fallen the Nazi regime, she is convicted. Moments before being taken to the scaffold, she remembers the song about wolves she learned as a kid in the French school she studied. Without fear she approaches the death that will see her rejoin her lost father, and hopefully, will bring her closer to the possibility to unmask the wicked character of the The Queen of Night in Mozart's opera Die Zauberflöte; a character quite intriguing to her, and also, where the novel takes its name from.

Rabies associated to canines explains in part the fear they arise amongst us. Joseph Meisner was just a kid when Jules Verne was writing his stories. Escorted by his mother, a farmer who had had her own adventure, Meisner arrived to the Pasteur Institute in order to convince the eminent scientist to apply his remedy on him. Pasteur did so, and that child became the first one to receive a vaccine against rabies. Years later, the concierge of the same institute, where Elia Metchnikoff also worked, was a Russian zoologist that fell in a depression state after his wife Ludmilla Feodorovitch passed. The depression was worsen both, by addictions, and by the persistent idea that humans are helpless against an omnipresent microscopic enemy. The despair found some relief in the company of Olga Belokopitova, and in the discovery that awarded him the Nobel Prize in 1905.⁶ The discovery was phagocytosis, the first confirmation that humans have their own mechanism to resist infection.

The Mesoamerican Indians, as well as the rest of the conquered civilizations, were unaware of the microorganism carried by the conquerors, unaware of their evolutive process, and unaware of the immunity against them. How desolate and how empty, how hollow and uncertain, must the Ohio Indians must have felt after they received the deathly present from colonel Henry Bouquet, when they saw the unfair way in which the disease treated them in comparison to their subjugators.

From evolution to genomics, the fast timings of biopower:

⁶ Bruno Gratzner, Walter. *Eurekas and euphorias: the Oxford book of scientific anecdotes*. Oxford University Press 2002, p. 17.

Diamond's explanation restores an evolutionist perspective into culture, seeking to uproot the foreclosed racism and xenophobia, and explains the biological conditions that shaped the colonialist expansion. It leaves out, however, the last five hundred years of that story; pristine Darwinism would state that it is very little time to be taken into account. Nevertheless, the genomics technology developed recently can dramatically reduce the temporality associated to the evolutive processes.

There were needed thousands of years to generate, from a biological point of view, the sufficient ecological differential required to give yield to colonizers and colonized; only a few hundred were necessary to homogenize the biological discrepancy around the globe. Then, in the midst of economic and cultural globalization, the technology essential to accelerate the evolutive processes by genomic manipulation becomes available. Along with nuclear weaponry, this technology helps to increase the uncertainty of science against the potential risks it might pose to the environment and to public health.

Based on the observation that the Myxoma virus, originally from wild rabbits in Brazil, killed domestic European rabbits, Australian farmers introduced it in their country deliberately in 1950, in order to protect their crops from the rabbit plague caused by their ancestors back in the XIX century. The first year the mortality of rabbits reached 98.8%, the second year it lowered to 90%, and was finally stabilized in 25%.⁷ The foolish virus evolved to defend its interest, not those of the farmers; to leave more rabbits alive is a good strategy to ensure plenty of hosts and enhance survival probabilities. Just an example of the uncertainty associated to the handling of viral genetic structures, this insecurity has modified the traditional notion of risk based in the calculation of scientific certainties. In order to protect public health and the environment against the uncertainty involved in some technical procedures, the legal basis of the *precautionary principle* was developed.⁸ It states that in the face of a risk, action can be taken to protect the public or the environment from the potential harm, even when there is no scientific consensus about such harm nor certitude of the outcome. The guarantor of this principle must be a legal authority mediating between the part accusing of the abstract danger and the denounced scientists. The existence and the faculties given to the guarantor define its action.

⁷ Ibid, pp.241-242.

⁸ Beyleveld, Deryck. Brownsword, Roger. Legal Argumentation in Biolaw. In: Kemp, Peter, et al. Bioethics and biolaw, Vol. 1, Judgement of Life, Rhodos International Science and Art Publishers, and Centre for ethics and law, Copenhagen, 2000. pp.215-16

Precautionary principle must not be mistaken with *preventive principle*,⁹ operating under a different concept where risk is calculable within the boundaries of scientific certainty. In this case, the guarantor of the principle is the scientific community that is able to calculate the specific risk involved. The relationship between the citizens and biopower will be a consequence of the relationship between this scientific community and the State and of the way it is structured.

As a result, there are some that anticipate a notion of the individual as an enterpriser that manages the govern and the risk of his own health,¹⁰ while there are others that document the collapse of the global public health system and the comeback of infectious diseases around the globe.¹¹

From the deepest point within guts:

As long as disease is contagious, the health of the individuals cannot be a responsibility of them alone. The partaking of the State is necessary to avoid the collapse of public health. Yet the mechanisms implemented to measure the sanitary relationship between the States and its citizens can be diverse, and the best fitted to both, the type of democracy we want to build and the maximum efficiency of the system must be found.

Only then, the structure of public health, the health care system, and the role to be played by the scientific and medical community, can be redefined.

An epidemy does not reveal, it just simply confirms what we already knew: in Mexico in the one hand, the investment on science is insufficient and, in the other, the health care system is torn apart and financially handicapped. This, however, only unveils, the greater mass of such iceberg: the decomposition of the Mexican State, the lack of interest by the political players to arrive to democracy,

⁹ Cafferatta, Nestor. El principio precautorio, Gaceta Ecológica, October-December, N° 073, Instituto Nacional de Ecología, Mexico 2004, p.9

¹⁰ Petersen, Alan. *Risk, governance and the new public health*. In Foucault, Health and Medicine, Routledge, London 1997, p.189 yss

¹¹ Garret, Laurie. *Betrayal of Trust the collapse of global public health*. Hyperion, New York 2000, 754pp.

the absence of appropriate ways to negotiate differences, the still far away transparency, and the rampant opportunism, that in a derridanian manner, makes promises to become threats.¹²

¹² Derrida, Jacques. *Decir el acontecimiento ¿es posible?*, pp. 104-105