

Worried about the Modification of the Genetic Heritage of Haitians

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Haiti was forced to sign the free trade agreement at the end of the twentieth century, under the threats of some international financial institutions Lucien (2009). These are maneuvers of imperialism. Imperialism has mainly used the structures at its disposal to impose its whims on small countries through regulatory devices, Grenoble École Management (2012). Thus the obligation was made to Haiti for its integration into the established commercial jungle, the Structural Adjustment Plan (PAS) of the markets. On the international level, referring to the Marxist thought of Gonidec Pierre François, these forms of agreements are the fruit of the balance of power between States. The PAS is neither fair nor equitable, it is only based on the capacity (power) of production, while third world countries like Haiti do not have this capacity. By this incapacity, they have been forced to become purveyors of raw materials to foreign industries, what some thinkers have called a “return to the plantation”. In the meantime, the developed and industrialized countries continue to occupy the market of these countries, including Haiti, with their products, because they have the massive production capacity and they are the holders of the technology. Under the weight of the SAP, Haiti therefore received an economic knockout blow. The local market is taken hostage, local agricultural production is absorbed by external producers, and the Haitian peasants are therefore annihilated. At first glance, however, the agreement purported to adjust world markets. That is to say, to make producers from small countries accessible to the markets of developed countries, under the obedience of the World Trade Organization (WTO). Similar facts in the world lead Grenoble Ecole Management to formulate such conclusions on North American and European States: it is States that establish international institutions so that they can control the agri-food market and its regulatory environment. There is no reconciliation between morality and political realism in international relations, a relationship which Stanley Hoffman (1971) seeks to establish through one of his works.

On the socio-economic level, the damage caused by the liberation of the Haitian market is flagrant in society. Having learned of the stated objectives of the SAP and the results produced in Haiti, it is therefore necessary to insist on the real motivation of the international. But also, it is necessary to think about the impacts of this project on the Haitian being in the long term. To move forward, our reflection is in line with the conception made by historians of imperialism. For the men of history, imperialism is first of all a system that binds the imperial to a colonial region. And, the

imperial wants to constantly keep this report to its colony. These ideas explain a relationship of dependence and the consequences of this relationship on the colony. But the analyzes are generally based on social, cultural and economic links between the metropolis and the colony, by dismissing biology in the demonstration. In our case, our thinking relies a little on the biological sciences to demonstrate the strategy used to perpetuate this relationship.

As a general rule the genetic complexity of the human being is demonstrated. Through which the possibilities of a potential genetic modification of the Haitian people is called into question. A phenomenon that could be effective over dozens of generations. And, it is one of the means for imperialism to perpetuate their market of supply and demand.

The Point on Imperialism

Marxist-Leninist conception, imperialism is the pinnacle of capitalism. According to this theory, imperialism is only concerned with extending its hegemony to occupy much more geographical space to sell its products and thus maximize profits. This theory, it is built only on the capitalist mode of production and the processes to widen the market of the offer and the demand, but it neglects the principle of the domination, affirms it Rosa Luxemburg [1]. Because of this lacuna, it is therefore criticized by certain theoreticians in modern times. For other categories of thinkers, such as historians, a nuanced conception is made of imperialism in relation to Lenin's theory. First, they defined this system as the ratio of the imperial to a colony or a “half-colony”, continues Luxemburg. However, all these reports that are established, it is for the control of souls by various strategies, making them dependent on the imperial. The context of domination in the world is evolved, so trade is one of the tools used for this purpose. Anyway, from the stage of slavery to modern imperialism, it has always been a matter of exploitation of one people by another people. However, the exploitation must be perpetuated to create gaps between the peoples and in return the gaps guarantee the exploitation of the peoples by the powers of the world.

On the Consequences of Commercial Liberalism in Haiti, Culture is No Exception

Generally analyzes are made by various theorists on the disaster caused in Haiti by the neoliberal plan. And, different consequences of the problem were addressed such as shantytown, internal and external migration among others. The explanation for these

phenomena is not homogeneous, because it is linked to other phenomena caused by commercial liberalism. For some thinkers, apart from the destabilization of the Haitian economy caused by the neoliberal plan, it also affects the cultural spectrum of Haitian society: the “Lakous”, for example. For Dr. Alix Daméus the Lakous are being destroyed for the benefit of farms, which are so-called economic units [2]. The notion of agricultural exploitation is capitalist ideology. The idea of agricultural exploitation changes the socio-cultural nature of the “Lakous” into an economic nature. However, farms, concretely they are minifundia, so they are not used for great things in the rural economy. A source of social imagination is gone. The “Lakous”, continues the author, were “crucibles of imagination and social reproduction”. They had a cultural and social structure that made them important socio-cultural elements. They are no longer so with the migratory phenomenon caused by economic decline. Thus, for the doctor in economics, the rural exodus in Haiti was first an agricultural exodus. This is how we can remember that the destruction of these crucibles of imagination under the influence of the neoliberal plan is considered as a factor in the deconstruction of the Haitian being, on the cultural level. However, the phenomenon can also be analyzed from a genetic point of view. Because human beings are susceptible to genetic mutations. Different factors, for Evelyne H can cause these mutations, including diet [3].

The Genetic Complexity of Human Organisms: Gene Expression and Gene Mutation

Generally, a clear distinction or even a frontal opposition exists between these two (2) notions: those of acquired characters and those of innate characters. In a succinct way, the first concept makes think of a process of social training of the man and the second as for him, makes think of what is predetermined, therefore which is independent of the man and it is unchangeable. Obviously, a conceptual dichotomy was established between these two (2) characters a long time ago and it still persists, reports Gloria Origgi [4]. This nuance provokes debates, generates research and some come to the conclusion that there is an interrelation between genetics and culture. That is, they claim that genetic evolutions can influence human culture and human culture can also influence genetic evolutions. However, in this case, the second case poses a lot more problems than the first for the proponents of this idea.

To understand this potential interrelation that weaves the cultural and the natural (genes), it is also necessary to understand the genetic organization of the human organism. That is to say, to have a solid understanding of the human genome, therefore the sequencing of the genes which are 30,000 in number existing in human DNA, Gloria Origgi [4]. Honestly, all these works are the fruit of those of the Austrian monk, Gregor Mendel. Through theirs, we were able to realize that the characters that define a living organism are under the control of hidden factors and determining heritability by combinatorial laws. And, these are factors called “genes”, a term coined by Wilhelm Johannsen; they would be responsible for transmitting characters from ancestors to descendants, Fleur Toulemonde-Darre [5].

The DNA fragments which are called genes, they are susceptible to being mutated. That is to say, modifiable under certain conditions. Gene mutation is primarily the result of replication errors and deficiencies in the genome repair system. The cause of the mutation of the genes can be carried out on the part of the exposure of the cell to mutagens present in the environment thereof or whether they are produced by the environment of the cell. As for DNA duplication, indicates Eichler, it is a very general phenomenon,

it is a form of chromosomal rearrangement. For this purpose, DNA produces a copy of itself. Clearly, the duplication of the genome implies the duplication of each of the genes and which would also allow the divergence of each of the copies of the genes present in the DNA. Therefore, the duplication of the genome is a source of genetic novelties and the complexification of the living organism, Fleur Toulemonde-Darre [5]. Also, the expression of a gene can therefore be inhibited by the presence of other genes, environmental factors, cultural factors and other regulatory factors. During DNA duplication, some duplicated sequences have retained the original function and others have acquired new functions or a loss of function is observed, its expressions are therefore modified, Ernst Mayr [6]. In addition to the elements mentioned above, the constraints that weigh on the evolution of genes cause the appearance of new functions which can be complementary or different from those of their ancestors, according to the model of neo-function, thus certain genes can also be created.

Indirectly, habits and traditions can also be part of the constraints that can weigh on the evolution of human genes. That is to say, they cause effects on the evolutionary course of our genes. Because, in an environment where the manners of acting of the man are little varied, the weakest rate of mutation is undoubtedly always selected; in replication the genes are loyal. However, when the environment changes, organisms have a higher rate of mutation. They strive to have a faster adaptation to this new environment, and save the cost of replication fidelity, Evelyne H [3]. So, experiments show that the mutation rate of some organisms can adapt very quickly depending on environmental conditions. Indeed, replication fidelity is an evolved property and an adaptation of organisms, Gloria Origgi [4].

Are Habits, Mores, Customs and Tradition Factors of Genetic Modification?

Man, by his way of life, he modifies his environment and in return in some cases he is forced to adapt to this new molded environment. This is the particular case of food. Therefore, the particular choice of a diet or other factors due to habits or tradition, that is to say adopted by cultural choice, have led to selection by mutation and which have allowed populations to adapt to it. adapt over a given period of time. Research shows that this process is slow but effective over hundreds of generations. It is therefore clear that insofar as the cultural choice, the diet, continues, this transmission is made from generation to generation, Evelyne Heyer [3].

Nutrition and Modification of Gene Expression

By delving into the field of nutri-genomics, we learned that most nutrients have the ability to modify the expression of human genes. They can induce a set of chemical modifications which maintain a certain stability, although reversible, in DNA. But it must also be said that they cannot modify DNA, this is epi-genetic modification. However, for a long time, these epi-mutations were taken for irreversible, during the life of a person because of their stable characters and they can be analyzed over a period of 5000 years. This phenomenon is a mode of regulation which makes available an “ignition” and “locking” system in the cell. And, in general, for Walter Wahli, in Futura -Science, it is a way for the cell to keep track of events that mark the life of an organism, and particularly during life [7]. fetus and in the early stages of postnatal life. They can then be transmitted from one generation to another. However, research has shown that they are reversible using nutrients capable of inducing or erasing these epi-mutations. Certain food components (fatty acids, vitamins, trace elements)

act as signals, controlling gene activity and determining genetic polymorphism.

The case of the Inuit population is taken as a typical example. She has a diet rich in marine mammals and therefore contains a lot of fatty acids. By studying them genetically, we see that he had selection for a FADS1 gene mutation. This gene facilitates the digestion of fatty substances of the Omega-3 type. In other words, the individuals who thanks to this mutation digest this fatty food better reproduced, survived better and transmitted this particular mutation better. Over the generations, geneticist Evelyne Heyer explains, this mutation has increased in frequency and is now carried by all Inuit. And, this mutation is due to a consumption habit [3].

However, the most telling example is certainly that of the digestion of milk and more precisely of lactose, the juice of milk. This approach then links the period of domestication, as well as the evolution of breeding practices, the nutrition of nomads and the genetic modification of humans in an important way, Nicolas C [9]. The pressures of natural selection are therefore exerted on the genetic heritage of certain human populations. The most widespread hypothesis to explain the distribution of this gene between different human populations involves a pressure of natural selection, which is exerted in certain populations with a long tradition of consumption of dairy products. Selection pressures of the order of 3 to 5%, insists Flatz (1987), are exerted during less than 6000 years can explain the distribution of this gene in Europe, for example.

The historians Gerbault and Rofflet-Salque have also shed light on the subject of lactose intolerance. For them, the geographical distribution of this typical phenomenon of “persistence of lactase”, found in adults, is correlated with ancestral practices, particularly pastoralism and dairy milking. The authors believe that this phenomenon of “lactase persistence” is hereditary and is caused by nucleotide changes in the DNA sequence of the human genome, supplying milk permanently, at this time. Because access to milk was possible thanks to the domestication of cows, goats and sheep, one of the ancient practices that began in antiquity [9-11].

Conclusion

Haiti's food dependence on the world's agribusiness giants comes after formally subjugating it to trade liberalism. In this regard, apart from economic devastation, destructive effects of culture are also brought about. In addition, other consequences are plausible, perhaps in the distant future. It is above all the phenomenon of genetic epi-mutation. Genetic epi-mutations can be transmitted from generation to generation and last for hundreds of years. However, it is a reversible phenomenon under certain conditions. Such a process should not have been attributed to chance, but to a project designed and built for several tens of generations, it is above all the work of the imperial; this is the dependency theory. Imperialism has used nutrition as a trigger for potential genetic modification, in order to maintain the economic captivity of the Haitian people, latent though it may be. The “intergenerational retention” of genetic variation within a population will also involve “the variation of cultural traits”. It is the transmission of developmental factors, and therefore changes in habits will be brought about. With these variations, the market for imperialism will remain strongly stabilized in the world of the poor. It should be remembered that the preservation of the market does not only pass through commercial maneuvers, but also scientific ones. To this end, imperialism endlessly increases its economic capital to the detriment of the peripheral countries. In such a context

where the countries of the North domesticate the countries of the South, Haiti to protect the Haitian being in all the dimensions of the concept, in the face of the imperial project, does not it need a State visionary, strong and sovereign?.

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