LUISS

DIPARTIMENTO DI SCIENZE POLITICHE

Cattedra di Sociologia Politica

The Struggle for Survival in the Network Era:

An Analysis of the Evolution of Darwinism in the

Natural, Social, and Digital Arena of Human

Interaction

RELATORE

Prof. **Michele Sorice**

CANDIDATO

Alessandro Alberti

Matricola **088552**

Table of Contents

Introduction

All animals are equal.

This predicament, written on the barn of the Animal Farm, is the first and principal commandment of Animalism. In George Orwell's novel, different farm animals, who were exploited by their human master Mr. Jones, decided to start a rebellion in order to create a society were individuals could be equal and free. In said society, animals enjoyed plentiful food and resources, and through education they were formed to have new abilities and opportunities. Orwell's purpose was to reflect the events of the Russian Revolution of 1917, but these egalitarian principles are shared by different socio-political currents in different points in time. Eminent examples are also found during the French and American Revolutions. Indeed, it is fair to presume that such achievements are possible only with an extensive evolution of civilization. Through time, social battles were fought by passing generations to bring equality, freedom, or justice. Such progress seemed feasible only through the massification and generalization of rights and opportunities. In other terms, the development of civilization fosters the development of individuals, and, vice versa, the benefit of the individual is the benefit of the whole. When civilizations lack of this purpose, soon inequality and injustice arise: "*all animals are equal, but some animals are more equal than others*". Henry Ford once stated: "Real progress happens only when advantages of a new technology", a concept that could be extended to any new discovery, also socio-political for instance, "become available to everybody".

Nevertheless, at first glance, these aforementioned statements seem at odds with the most basic natural theory described by Darwinism: only the fittest are meant to survive. No resources should be wasted in sustaining the weakest links of the chains, as their demise, or even extinction, is inevitable. On second thought, however, it is possible to find the link between the two ideas, making them compatible and coherent. Indeed, we have stated before that better opportunities are possible with a better society. When

civilization is not capable of sustaining all individuals' civil liberties, the weakest are the first to be most probably harnessed or considerably disadvantaged. On the other hand, a more functional and balanced ecosystem may grant all its living organisms not only the opportunity to survive, but also to thrive and reproduce.

Therefore, what happens when civilizations reach a point of abundance of resources and almost non-competition? Could they evade the Darwinist "struggle for survival" system? Could this bring an end to evolution? My dissertation will have the objective to study and analyze the development of civilization and its stages up to present times, in order to give an answer to the previous dilemmas. As a matter of fact, as an ecosystem is generated with the interaction of its organisms, we should consider the natural and social ecosystems as different. They share some fundamental rules, but they develop quite differently. The second attempt of this paper is to thoroughly understand the ramifications of the new digital arena with its current phenomena, like the role of influencers, or the "issuefication" politics. This new arena, the digital world, is indeed another ecosystem in which the *homo sapiens* species interacts, and just like the other systems, in the digital world there are predominant species, the instinct for survival, evolution, and selection. In addition, just like the social world was an attempt for humans to evade the natural world and its struggles and limits, we could interpret the digital world as an attempt of evasion too.

The theoretical process starts with a methodological approach, by finding the unit of analysis, the measurement and stage development. This assessment is viable through the study of works regarding both Natural Darwinism, designed and explained by Darwin of course, and Social Darwinism, with the theories developed by Herbert Spencer and other Anglo-American scholars. Here, the study will try to grasp the key concepts of Darwin's revolutionary theory and understand its application on both the natural and social ecosystems. The next step is then to apply the resulting method to the arising digital world too, studying both the new environment and the individuals affected by it. The final result will be a clear distinction of the evolutionary phases of

civilization and a better understanding of the ground on which the natural, social, and digital worlds are built upon.

Assumptions

During the dissertation *On the Origins of the Species*, Charles Darwin (1859) explained how every species is extremely affected and molded by the environment they live in. Those who are less suited are less likely to survive and reproduce. Hence, only the fittest mutation of the species has the chance to endure, as it is explained in the process of natural selection. Populations change as the environment requires. Adaptation or extinction are the inevitable processes, and nature itself is to be considered their absolute arbiter. At least, generally speaking.

As for the natural environment, also the social scene is structured among strict rules. In fact, there are several parallel routes between the natural and social worlds. For example, changes in physical traits and features are an expected and necessary aspect of natural development. Translated to the social sphere, the change of values and virtues, is not only natural, but the propellent for progress. Physical strength, dexterity, or constitution of a predator may be considered equivalent to wealth, power, or charisma in the social world. Moreover, the social ecosystem must be considered as a chronological and logical evolution of the natural struggle for survival. In fact, the research will later show how humankind, through the birth and development of civilization, succeeded in evading the natural food chain, even becoming its master.

This was an immense step forward. The opportunities tied with this achievement are caused by abundance of resources and a vastly higher chance of survival and reproduction. On the other hand, some traits continue to exist in the passage from the natural to the social world. The allocation of resources now depended on new conditions, not linked to natural reasons. Resources are now portioned following socio-cultural and political rationale. What was the reasoning applied at the beginning of

society? This is a question that almost certainly will remain a mystery. However, several philosophers wondered and attempted to explain the process of human evolution from the state of nature to modern societies. Prominent examples are Hobbes, Locke, Rousseau, and Rawls in modern times.

Regardless, understanding the best way to arrange resources has always been the center of political and economic debate. Social Darwinism emerged as one of the viable solutions, with the most relevant peers being Herbert Spencer and William Graham Sumner. As the name may suggest, it supposedly holds the basic premises of Charles Darwin's theory. Social classes and races are clearly distinguished. The powerful and wealthy, who thrive in the modern world, are considered stronger and higher in ranking. They eat better food and have better healthcare. Indeed, societies usually allow for such inequalities. Their privileges are in fact justified by the way society is arranged. For instance, Spencer, being a liberal capitalist, affirmed that there should be nothing wrong with social and economic inequalities, as only the fittest are meant to survive. Briefly, if someone is richer or more powerful than others it is because they are more capable. In fact, he applied the Darwinist approach to the economic process, fostering unleashed capitalism and opposing any law that could help the lower classes, as he would consider them the "unfit".

In contemporary times, a new battleground has risen. Once again, the values from the past are shifting and changing swiftly. Society is witnessing a similar process to the one that involved nature at the beginning of civilization. The principal and formerly most prevalent ecosystem of interaction is becoming the external and secondary frame. The new emerging scene is the virtual and digital world. From the second stage of Social Darwinism, it may be possible to foresee a Network Darwinism. If higher ranking in society were reached with wealth and power, nowadays one must accumulate virtual mass consensus, or, strictly speaking, followers. This new environment gave birth to new actors while changing the power of the old, for better or worse. The effect on politics is factually huge. It was not as impactful on the legal side, as the structure of states did not de facto change. However, it is fair to say that it

changed the methodology embedded within social structures. For example, the instruments of propaganda and media almost completely relocated to new platforms. This led to a pollution of the communicative system, both from politicians themselves and average citizens, due to deregulation. This will be sustained by the theory that digital identity is built as a shadow of the human emotive state, not cognitive as in the social world. As each operation taken by users creates data, and the digital profiling algorithms react to individuals' decision-making, we will unveil how the digital identity must be distinguished to the material identity. This, of course, holds prominent philosophical significance, and it is of paramount importance in the understanding of the digital ecosystem and its inhabitants. During this research, there will be a transposition of the unit of analysis for each ecosystem. In fact, the point of interest gradually passes from cumulative to individual perspective. In a natural environment, we are concerned on the fate of a species. In the social world, classes are the relevant actors. In the digital world, only the individual, as a user and consumer, is the unit of analysis.

Chapter I: We came a long way

As this study has the purpose to design a structural theory and apply a new form of Darwinism for the digital framework, it must be founded on solid scientific and historical ground. Indeed, the following chapters will start from both the natural and Social Darwinism, grasping the fundamental pillars of each theory and, from that, build a digital rendition of Darwinism.

This first chapter will be developed in two steps. Firstly, by retracing the works of Charles Darwin, the research will underline the main relevant components of a natural ecosystem: its structure, laws, and formulas. Secondly, the study will focus on justifying the underlying assumption that humans passed from a primitive state of nature to a developed form of social structure. Even if this thesis may appear obvious, or at least, already vastly considered, it conceals a subtle but yet fundamental premise that gives structure to this research. As a matter of fact, the birth of civilization meant the gradual detachment from almost all the previous burdens of natural life. The more the social structure evolves, the more the natural limits are overcome.

Afterwards, the second chapter will deal directly with Harari's theory of *cognitive revolution* (Harari 2011) and Spencer's and Sumner's theories of Social Darwinism. As a matter of fact, the two Natural and Social Darwinisms are indeed intertwined, but part ways in different situations. For this reason, the two theories will be treated separately, analyzing single elements from each system. For instance, Darwin himself thought that Spencer completely misunderstood his natural principles, bending the facts to his theories, rather than adjusting the theories to facts. In his *Autobiography* (Darwin, 1876), he describes the main differences between his and Spencer's work:

"Herbert Spencer's conversation seemed to me very interesting, but I did not like him particularly, & did not feel that I could easily have become intimate with him. I think that he was extremely egotistical. After reading any of his books, I generally feel enthusiastic admiration for his transcendent talents […]. Nevertheless, I am not

conscious of having profited in my own work by Spencer's writings. His deductive manner of treating every subject is wholly opposed to my frame of mind. His conclusions never convince me: and over and over again I have said to myself, after reading one of his discussions,—"Here would be a fine subject for half-a-dozen years' work." (Darwin, 1876)

After he responsibly distanced himself with Spencer's theories, he then attacks the methodological and scientific standpoints on which Spencer's works are said to be founded.

"His fundamental generalisations (which have been compared in importance by some persons with Newton's laws!)—which I daresay may be very valuable under a philosophical point of view, are of such a nature that they do not seem to me to be of any strictly scientific use. They partake more of the nature of definitions than of laws of nature. They do not aid one in predicting what will happen in any particular case. Anyhow they have not been of any use to me." (Darwin, 1876)

As an anti-slavery individual, Darwin despised the social ideologies proposed by Spencer, and was more than upset to see his theories be used as starting grounds for the early forms of eugenics and racism. However, the expression "the survival of the fittest" was coined by Spencer, a proposition that Darwin gladly started to borrow. In addition, in later years Darwin had shown interest and positive considerations in Spencer. For instance, Darwin stated that Spencer had found the "principle of life", which explains that different beings' constant actions and reactions always tend to balance one another. He is also considered by Darwin as the founder of the evolutionist approach in psychology. Thus, it will be interesting to outline how these theories converge and where they differ. Indeed, Darwin's theory was not the result of just scientific evidence and findings. Rather, it was also the fruit of socio-political, economic and philosophical considerations. Ordinary Professor Telmo Pievani, in his work *Anatomy of a Revolution* (Pievani 2013), had underlined the influences Darwin received by the works of Thomas Malthus. Pievani (2013) stated that, indeed, Darwin

already assumed that there was a "natural control" of sorts on the number of organisms and resources. However, it is the Malthusian political economy that showed him that populations tend to thrive indefinitely if left alone until there is a shortage of resources. When that limit is found, there will be a balanced relationship between the habitat and its population. Moreover, *Adam Smith's Wealth of Nations* (1776), enlightened him with the interpretation that individual competition is the engine for change. In fact, the benefit of the individual is the benefit of the Nation, if properly left expressing in free enterprise. In conclusion, the Malthusian "brakes" in nature are competition, predators, differential reproduction, extinction. Through them, the "invisible hand" of natural selection fosters mutations that offer benefits which are best fitted in the struggle for survival.

His philosophical and sociological influences became useful particularly because of the shortage of crucial evidence or feasible experiments he could use to prove his theory. Therefore, his tools were simple inferential analysis, convergence of evidence, probability, and the *reduction ad absurdum* for what regards creationist's theories. In other words, rather than solid and proven scientific evidence, he had to use coherent and strict logic matched with an effective and solid argumentation. All instruments, customarily speaking, of a generic philosophical dissertation. Pievani (2013) proceeds to explain the methodology applied by the English naturalist. Darwin organized his thoughts presenting his explicative core first, and then elucidating the several consequences and ramifications. In this way, he explained fore and foremost that the natural selection and common ancestry had to be necessary processes to understand the whole mechanism. We should keep in mind that he was attempting to solve the "mystery of mysteries". In other words, his work tried to solve how life started and developed since the dawn of time. Indeed, it was not an easy task. He had to efficiently evaluate the causal order and the rhetoric sequence in order to show in his works the strong link between common ancestry and natural selection. In addition, he dedicated a large portion of the book to answer hypothetical objections that readers, or more likely, fellow colleagues, would eventually raise against his theory. Only at this point,

at last, he shows the huge mass of evidence that corroborates his points. As a matter of fact, his mechanism, even if not proven directly, must be considered solid *indirectly,* as no evidence has shown different results to those predicted or has risen any doubt regarding Darwin's criteria.

Afterwards, Darwin (1859) outlines what can be said to be the general laws that concern all life:

"These laws, taken in the largest sense, being Growth with Reproduction; Inheritance which is almost implied by reproduction; Variability from the indirect and direct action of the conditions of life and from use and disuse; a Ratio of Increase so high as to lead to a Struggle for Life, and as a consequence to Natural Selection, entailing Divergence of Character and the Extinction of less-improved forms. Thus, from the war of nature, from famine and death, the most exalted object which we are capable of conceiving, namely, the production of the higher animals, directly follows. There is grandeur in this view of life, with its several powers, having been originally breathed by the Creator into a few forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being evolved."

In this paragraph, he entails all his ideas in single lines of reasoning, which he himself calls "*one long argument*". He mentions the general principles that govern and balance all nature's vital forces, from reproduction to variability, from growth to the equilibrium with the ecosystem. However, all these ramifications always derive from the solid and inevitable primal force, which is natural selection. The constant and silent war all living beings are facing has brought the primal and monocellular organisms to evolve into higher animals. However, even with all these logical precautions and the intention of preserving the argumentation of these principles, other scholars and commentators tended to accept rather quickly the evidence regarding common ancestry of all living beings but refused or doubted the Darwinist causal mechanism of natural selection. Of course, these two concepts are logically distinct and separated. It is

possible to conceive a long legacy of different species that had not evolved necessarily through natural selection; and vice versa, different species that evolved through natural selection must not necessarily have a near common ancestor. However, the objective that Darwin wants to achieve is to describe the inseparable link between the two. Unfortunately, the English naturalist's purpose had to wait until the 30's of the twentieth century to become true, when the populations' genetics finally corroborated in toto his theory.

His other main purpose, which is also described in the cited paragraph, is describing the concept of variability and mutation. First, he debunks the theory that regards the external conditions, or the animal habits and wills, as the engine for change. Preposterous, he claims. He takes into analysis domestic plants and animals to observe those hereditary "many little variations" that makes them distinguishable with members of the same species which instead are in the state of nature. The first discovery, found after several evidence provided by farmers, home experimentation, and international correspondence, is that variation is wider in the domestic species, which is actually fairly logical. In other words, he elaborated the explicative model of the artificial selection. The second discovery is that variation is permeated in each generation, but it is strictly individual. It is almost impossible to find two absolutely identical animals or plants. Through artificial selection, these distinctive traits are usually picked consciously by farmers and botanists in order to find the perfect mix for the perfect breed.

"We cannot suppose that all the breeds were suddenly produced as perfect and as useful as we now see them; indeed, in many cases, we know that this has not been their history. The key is man's power of accumulative selection: nature gives successive variations; man adds them up in certain directions useful to him. In this sense he may be said to have made for himself useful breeds. The great power of this principle of selection is not hypothetical. It is certain that several of our eminent breeders have, even within a single lifetime, modified to a large extent their breeds of cattle and sheep.

Breeders habitually speak of an animal's organisation as something plastic, which they can model almost as they please." (Darwin, 1872)

However, with regards to the situation in the state of nature, Darwin has different sources of variability. He wants to avoid any type of natural theology and any propositions of divine design. Evidence proves him right, as there are many mutations that reveal themselves to be disadvantageous, and thus bring scarce chances of survival and reproduction for their host. He states that it appears improbable that all mutations appear immediately as the perfect modification for guaranteeing survival. Many are the chances that must be taken before success. Thus, it appears logical to concur that chaos must be the arbiter of such mutations, and not an omniscient perfect hand that guides evolution. Moreover, it must be considered that, unlike in the domestic state, variations do not emerge as the answer to a necessity, functional or aesthetical it is. They just emerge, presenting themselves as raw materials that are shaped eventually by natural selection. However, it must be clear that the propellent for evolution is natural selection, not mere chance.

It is the great battle for life that decides which mutations are useful and which will lead to extinction. Once exiting this circle of selection, each mutation will have the chance to develop freely, without even needing to find an evolutionary purpose. However, this hardly ever happens. Hardly, but not never. Such prosperity, which may lead to overpopulation, is usually stopped by the Malthusian trap. When population growth exceeds the number of resources available to said population, usually depopulation occurs. This has the effect of putting the population rate back to more sustainable levels. Malthusianism is far stronger on animals and plants than on humans, as we have now harnessed the competence both to prevent and to cure, with social engineering, such catastrophes. However, recent events have proven that we are not totally immune. According to such theory, these Malthusians "checks" imply a natural balance between resources and population. As said, with the advance of technological development, such balance has shifted, increasing the supply of resources, thus also increasing population growth. However, unlike with the struggle for survival, humankind will

break out of the Malthusian trap with great difficulty. As already mentioned, we are not immune. Overpopulation, extreme poverty, pollution, and famine are all evidence that such balance is still a strong and effective natural prerogative. On the other hand, such social theories are not of our interest for the moment. As a matter of fact, we should just keep in mind that the saturation of the environment, which leads to competition and struggle for survival, is governed by the Malthusian principles. Consequently, the principle of natural selection applies. Little casual advantageous genetic variations will have higher chances to spread across the population thanks to the reproductive success of the bearers, who are inherently best adapted to survive in the circumstances of their natural habitat.

"Owing to this struggle for life, any variation, however slight and from whatever cause proceeding, if it be in any degree profitable to an individual of any species, in its infinitely complex relations to other organic beings and to external nature, will tend to the preservation of that individual, and will generally be inherited by its offspring. The offspring, also, will thus have a better chance of surviving, for, of the many individuals of any species which are periodically born, but a small number can survive. I have called this principle, by which each slight variation, if useful, is preserved, by the term of Natural Selection, in order to mark its relation to man's power of selection." (Darwin, 1872)

Darwin has thus explicated thoroughly the first main core of his theory of the natural selection. Now, he will conclude his voyage on the origins of the species with the discovery of the common descent, or else called common ancestry. The main task is to demonstrate that natural selection not only produces small variations, but also generates completely new taxonomic traits creating new species that will best fit the environment they live in. With this assumption, he also states that an ecological context, wild or domesticated that is, the more variations and diversifications will contain, the healthier and stable it will be.

"Natural selection, also, leads to divergence of character; for more living beings can be supported on the same area the more they diverge in structure, habits, and constitution, of which we see proof by looking at the inhabitants of any small spot or at naturalized productions." (Darwin, 1872)

This divergence of character, as said, leads to new separated species and evolution. The descendants of each species will diversify as much as they possibly can in order to find a place in different ecosystems. Of course, the more the merrier. The price to pay for a failure in adaptation, is extinction. As a matter of fact, if an organism cannot find through variability a means for survival, it will inexorably disappear. For this reason, common ancestry and natural selection will jointly proceed to explain the great mystery of the birth and development of life. The fittest individuals will tend to multiply more than the less fit if there is a favorable variation. The English naturalist also takes into account the conditions of an isolated ecosystem. He states that even if isolation is a propellent for the production of new species, a vast and open region offers better possibilities for variations thanks to the greater extent of individuals that live there and the cohabiting of different species.

An Organism Called Homo Sapiens

This natural law gives us the chance to find a first parallelism between nature and human society. Indeed, we can consider the different physical characters in the natural world as the different cultures and languages that exist in the human world. We can find examples of cultural and geographical isolationism in the hidden tribes around the world. We shall take into example the Sentinelese, the most isolated tribe in the world, who live in a small, forested island called North Sentinel in the Indian Ocean. They decided a long time ago to stay completely isolated from foreigners, recurring also to violence. They are extremely vulnerable to diseases to which they have no immunity, like fever or measles, so any contact may be very dangerous. Their lifestyle is

extremely primitive, with some primal use of technology like wood weapons, handmade canoes, and some clothes. This is what appears from a report of Survival International (2019), a group of activists whose purpose is the protection and safeguard of tribal people: "From what can be seen from a distance, the Sentinelese islanders are clearly extremely healthy and thriving. The people who are seen on the shores of North Sentinel look proud, strong, and healthy and at any one-time observers have noted many children and pregnant women." (Survival, 2019). Indeed, this tribe has proven to be extremely fitted to the environment of the island. Accordingly, there was no noticeable cultural or technological development, and thus, no need for variation, as their isolated condition got rid of all the possibilities and opportunities for social evolution. On the other hand, other civilizations had the possibility to develop and evolve thanks to expansion, exchange, and even conflicts, with other populations. Of course, this has also brought to the destruction of entire cultures and populations, and even to their extinction. Nevertheless, this does not differ at all with what happens in the wild through natural selection. Hence, cultural evolution appears to follow the same principles of Darwin's evolution. He himself states that less competition in small areas is responsible for those species that remain the same for millennia.

The last point is crucial, as it may finally prove how humankind left the natural stage behind and reach the social stage. As a matter of fact, the previous statement explains that evolution is NOT a necessary phenomenon. If a species loses those circumstances that foster the need for change, hence variation and selection, evolution itself slows down until reaching a static point. Mankind has reached two important milestones that Darwin had put as limits for all natural organisms, as we have low to no biological variability and we are free from competition. The evidence to prove this is that humans have gradually settled in almost any environment and ecosystem on planet Earth. Moreover, there is really no other species that could represent "competition" to the *homo sapiens* in the strict predator-prey system. Of course, a single person may still be vulnerable to the attack of a tiger, snake, a spider, or even a virus. But no other living being on Earth can represent a challenge to mankind, whereas humans, for how brutal

and cynic this may seem, have the power to wipe out entire species with not just few efforts, but also in relatively short timescale. It goes without saying that it is this precise attitude of omnipotence over nature that generated the enormous environmental issues that we are facing nowadays. Regardless, it was the birth of civilization that gave humankind this power. Indeed, civilization may have brought human natural evolution to an end.

It is important to emphasize the remarkable achievements of humankind with respect to any other animal on the planet. No other species on Earth had the possibility to settle in every ecosystem. But what does this mean, and how is it possible? First, a definition of ecosystem must be given. An ecosystem is identified by Encyclopedia Britannica as "*the complex of living organisms, their physical environment, and all their interrelationships in a particular unit of space*" (Augustyn, 2020). The two major forces that connect living and non-living constituents are the flow of energy and the cycling of nutrients with the ecosystem itself. This is the place where natural selection intervenes, as each ecosystem requires a harmonious interaction between each constituent to reach a balance. The balance is composed by quite rigid parameters that determine the specific nature of the ecosystem, such as climate, food or water availability, number of predators, habitable shelters, and many more. Although a change in these parameters, even slight, may drastically change the nature of the habitat, or destroy it, usually a new entry, like an extraneous plant or animal, faces a harsh conformity trial. If the new organism fails to adapt to the ecosystem, it will perish. It is true that some living beings have displayed great adaptive capabilities, but they all went through serious trials of adaptations. Humankind, except for some physical traits, cannot be distinguished in races, for example. This is not only true for the socio-political implications, but biologically too. A research based on the Human Genome Project (2020) has proven that there is more genetic variation within a single population cluster rather than between two distinct populations clusters. The variation that exists in the different populations around the globe is in fact continuous, not discrete. This means that different regions of the world do not host different races of

homo sapiens, but simply that people who live closer share more genetic material than those that live apart. On the other hand, any other species is deeply affected by the ecosystem they live in. It is implausible to see a group of animals simply move in new environments and settle there. Actually, it is much more likely to see animals migrating because the conditions of the ecosystem they lived in have changed, and so they chase new places where to settle with the conditions they are most adapted to. If they do change habitat, it is because a new mutation has arisen that rendered them adapted to it. In conclusion, the *homo* genre is the only one who has been capable to overcome its physical limitations to travel in other ecosystems and adapt to them through other means rather than physiological mutation. Yet, how such enterprise was possible must still be answered.

An Arrow Through History

Jerusalem Hebrew University Professor, Yuval Noah Harari, attempted to give an answer in his bestseller work *Sapiens: from Animals into Gods* (Harari, 2011). We shall see in the next paragraphs a summary of his concepts and how they are useful to explain how the birth of civilized society proved crucial to the departure of the *homo sapiens* from their natural perimeter.

First, he immediately establishes how humans developed to be a social animal. He states that natural selection was, as we have now learned, the responsible. As a matter of fact, a lone mother could have had serious difficulties to find food for her and her offspring if not helped by other fellow human beings. An entire tribe is needed to grow a human child. Evolution required that the only people to survive were the ones with strong social skills. Those who were not able to tie solid relationships with other fellow human beings, were destined to perish. In addition, the limits that our relatively weak body imposed to mankind was also overcome by other means. For instance, by successfully taming fire, we acquired an important evolutionary benefit that was

completely independent of our body. As a matter of fact, even a child, with the right skillset and a few sticks, was able to light a fire that would destroy a forest in a few hours. In a more comprehensive analysis, several are the tools we usually associate with human evolution: wood and stone utensils and weapons, a big and developed brain, a good memory, and so on. However, he continues, these features had been available to humankind for about two million years already, while the *homo sapiens* started to climb the food chain only in the last hundreds of thousands of years, and even quite swiftly. Other apex predators, like lions and sharks, took millions of years. On the other hand, humans achieved the first position so quickly that the entire ecosystem itself was put drastically off-balance. Even mankind was not ready. In fact, we feel insecure most of the time. It has been demonstrated that the fear and anxiety we have for our ranking position is traceable back to our hunter-gatherer's subconscious, as we do not originally belong to the peak of the food chain. It is fair to say that several ecological catastrophes and costly wars were caused by the psychological consequences of this sudden change. To find the cause of this fast transformation, we should focus on the new ways *homo sapiens* developed their communication and thinking. This mutation is defined by Harari as the Cognitive Revolution (Harari,2011). Our means to communicate is language. At the beginning, as all animals' forms of communication, it was quite sterile and simple. It was used primarily for warnings and dangers, like other animals do. With the development of language, the sapiens were able to transfer big quantities of useful information and develop new forms of knowledge with the use of just few and simple sounds and signals. Afterwards, it also gave primitives the possibility to develop intimate relations and relationships of trust. Consequently, it generated far more sophisticated and close-knitted types of cooperation. Moreover, what rendered the human language so special is that it does not only communicate real life subject matters, like the position of a rival tribe, the venomous nature of a fungus, or the organization for the most effective hunt strategy against a herd of wild animals. Indeed, with just this, it could have already been an extremely useful tool for social cooperation. However, effectively communicating and

referring to what was real and concrete was not the step that ignited *sapiens* evolution. In fact, it was quite the opposite that made our species unique. The *homo sapiens* language had, for the first time in Earth's history, the capability to effectively communicate also what was NOT real. For what is known, only *sapiens* may converse about something that they have never perceived or sensed: abstract concepts, religious events, narrations, myths, and fictions. No other animal would believe in an after-life where they would be forever happy, with a full belly and an angelical choir to comfort them for the rest of eternity. Of course, one could, rightfully or not, consider such ideas and abstractions complete nonsense, even dangerous. In fact, it would be very risky to send people, maybe even valiant warriors, on a quest to find dragons or elves in the middle of a forest. It would be wiser instead to search for food, water, or a new shelter. However, this was, as absurd it may seem, a fundamental step for human society. Harari states that it not only granted us the power to imagine things, but to do so collectively. These myths, he continues, conferred *Sapiens* the capacity to cooperate flexibly and in huge numbers. Bees and ants are also able to work in cooperation with vast numbers, but they do so with extremely rigid social schemes and with tight bonds of familiarity. Wolves and chimpanzees cooperate very flexibly, far more than ants and bees, but in very small numbers that also share extremely close and intimate bonds. Humans instead, with the aid of collective abstraction, succeeded in grouping hundreds of thousands, even millions, of people to cooperate effectively every day.

Indeed, it seems like a bold statement. How can we possibly believe that the entire human history is driven by faith in something that is not real? Furthermore, how can we possibly believe, in a pragmatic, post-modernist and positivist society as we live in nowadays, that we could still be guided by the total belief in abstractions? However, it would have been impossible to convince thousands of *homo neanderthalensis* to build giant ziggurats in the middle of an alluvial plain in the Persian Gulf. To this date, it is impossible to convince a wolf to exchange a prey he just hunted for some pieces of gold. It is written nowhere in nature that *homo sapiens* have civil birthrights, or that it should give a percentage of his works to the State, an entity that does not even have

any physical form. It is important to underline that abstractions are embedded in our whole culture. They are not just religious beliefs or social customs, but also entities that can be measured, identified, calculated, and are also predictable in their behavior, like money for instance. Nationality, freedom, finance markets, firms and companies, numbers themselves: these are all abstractions that serve a precise and fundamental purpose in human existence. Humans passed from small tribes to the modern metropolis that we see today because they were able to agree about imperceptible and unmaterial things. The medieval French kingdom was feasible because people started to believe in the golden ring that an individual, who did not necessarily have any special skills, talent, or power, put on top of his head as a crown. Of course, all these examples are oversimplified forms of reality. However, what must be taken into consideration is that, in conclusion, at the beginning of the cognitive revolution, the *homo sapiens* had been living this dual reality. On one hand, the objective reality of rocks, rivers, and animals; and on the other, the abstract reality of gods, nations, and currency. Since then, the abstract reality has become stronger over time, to the point that the existence of the objective reality is directly derived from the abstract one of gods, energy, and nations. Harari (2011) affirms that through the cognitive revolution *homo sapiens* has learned to adjust its behavior with great speed, adapting depending on necessity. Hence, he succeeded to bypass, in Harari's words (2011), the slow and jammed genetic evolution thanks to the cultural evolution. With this faster evolution, *homo sapiens* rapidly left behind not only other fellow *homo* species, but also other animals specialized in cooperation. In addition, *sapiens* were not only able to change their behavior based on the circumstances, but also to effectively transmit them to future generations. Generally, it is impossible that big changes occur in animals' social behavior without a genetic mutation. For what is known, mutations in social systems, the invention of new technologies, and the settlement in unknown habitats are caused by genetic mutations or for environmental needs, surely not because of cultural initiatives. However, as mentioned earlier, after the cognitive revolution, *sapiens* were able to change their behavior quite swiftly and to pass it to future generation without

the need of any genetic or environmental mutation. In summary, the cognitive revolution brought to a massive increase in the transmission of information regarding the world that surrounded the Sapiens, which led to effective planning and execution of complex actions, extremely useful for hunting and survival; a diffusion of complex social practices, that brought to wider and more cohesive groups of individuals; and lastly and most importantly, the communication of concepts that do not exist in objective reality, which brought to even wider cooperation and rapid innovation in social behavior. What we call culture, is just the wide variety of figurative realities invented by *sapiens* and the consequent principal components of behavioral models. Once created, cultures will never cease to develop and mutate, and these unstoppable alterations form what we call history. This is the point where Harari's thesis converges with this dissertation. As a matter of fact, the cognitive revolution marks the point where the history of *homo sapiens* became independent of biology. Before this revolution, the actions of the human species belonged to the biological reign. From that point onwards, the historic narrations took the place of biological theories in explaining the ways humankind has developed and evolved. In other words, concludes Harari, biology determines the basic parameters for *homo sapiens* behavior and capabilities.

Chapter II: The Birth of Civilization

All history develops in the limits of the biological arena. However, said arena is extremely extensive and allows *sapiens* to play a wide variety of moves. Thanks to their ability to create abstractions and fiction, they elaborate increasingly complex systems, that each generation develops and processes further. For this reason, to understand how *sapiens* evolve, we must follow the historical development of their actions. Biological evolution is not sufficient anymore.

As a matter of fact, history matured in such a way that our biological parameters were not only overcome, but also diverted. Is not enough to take into analysis the scientific high ground, like the development of modern medicine, plastic surgery, or even gender transitioning. Indeed, these are all achievements that permit humankind to surpass certain biological obstacles. However, what is worth of attention is rather the impact that cultures have over biological parameters. For instance, several traditions clearly go in contrast with the so-called "the natural laws". Just consider the occurrence of elites that willingly do not produce any offspring, like the catholic clergy, Buddhist monks, or the eunuchs. The very existence of these social classes goes against the most fundamental basis of natural selection, as these individuals voluntarily refuse to procreate. Another example is the month of Ramadan, where Muslims spend a whole month fasting during the daylight hours. Refusing to eat is clearly a risky activity: it may produce harmful health effects on individuals, especially those who already suffer from other conditions. Yet, it is a tradition deeply rooted in the Muslim religion, being one of the five fundamental pillars of Islam.

The cultural evolution arrived as a domino effect also in all other aspects of human development. As a matter of fact, through time, *sapiens* acquired the means to cooperate and reach the technological and the organizational capacity to also conquer the rest of the Earth. Again, they did not travel to Australia 45.000 years ago by growing fins on their back to swim or gills to breathe. Biological evolution has no merit. Indeed, the first nautical villages of fishermen, merchants, and explorers

appeared on the coasts of Indonesia. They started to build effective means of navigation and learned to travel by sea. Moreover, *sapiens* did not limit themselves to reaching Australia, but they conquered it. They did not simply settle in this new habitat. They irreversibly transformed it. From that moment, evidence shows that humans had finally reached the apex of the food chain. 90% of the Australian megafauna went extinct the moment humankind reached the island. A similar mass extinction occurred in New Zealand 800 years ago with the arrival of the Maori. *Homo Sapiens* reached the peak of the world by becoming an ecological serial killer (Harari, 2011).

There is a consideration to make about the previous assessment. Even though this is a brutal and ruthless reality, in this period humankind was at its peak of physical and mental prowess. *Sapiens'* was flexible and diversified, reliant both on the ecosystem and on what they were able to gather, which was their most reliable source of food, or hunt. To survive, they also designed detailed and precise mental maps to remember the interesting position that surrounded them. They could remember where a bear's den was, or learn the nutritious properties of each food, which plant was toxic or had medical effects. Each member of the tribe usually had several technological and handicraft skills. They all knew how to build a knife, or an arrow, or how to fabricate clothes from untreated animal fur. Nowadays, we are evolved enough to have extremely deep knowledge about a single argument. We study and learn for decades all there is to know about a specific subject, and thus, collectively we cover an extremely extensive area of knowledge, far and wide. However, taken singularly, on average we have way less general knowledge than our ancestors. In addition, they constantly used their bodies, thus reaching physical strength and dexterity that nowadays only Olympic athletes possess. Moreover, they had even a better lifestyle, hunting just one out of three days and gathering for three to six hours a day. This was all the time needed to feed the entire group. This type of economy granted more free-time and a more interesting life compared to the one of a modern worker, who perhaps spends eight or more hours a day compiling data in front of a computer screen. At last, as said, they had a more diversified diet than their immediate successors: farmers. In

comparison, they suffered less from famine, malnutrition, diseases, and the effects of natural disasters. Not to mention the fact that specialized existence allows the existence of "stupidity bubbles". As aforementioned, hunter-gatherers tribes required each member to have a certain degree of mental and physical ability in order to survive. This follows all the Darwinistic principles that we have mentioned previously. However, in agricultural and more complex societies, those who were less able than the rest of the group were "spared" from a cruel destiny. Such a choice, for how ethical a decision it is, could decide the fate of an entire group of *sapiens* hunter-gatherers. There was no space for the less abled. Thus, all things considered, it seems that passing from a hunter-gatherer lifestyle to that of agricultural settlers had brought several backslashes, both physically and mentally. Yet, it suddenly became the norm of almost all the *homo sapiens* species. Darwinistically speaking, this seems paradoxical.

Building The Social Ecosystem

Why did humans leave a lifestyle that could feed them abundantly and sustain a rich world of social, religious, and even political structure, like the one of hunter-gatherers? About 10.000 years ago, *sapiens* started to dedicate almost all their time and energies to manipulating the existence of a few animals and plants, implementing the first forms of artificial selection. They thought that all this work would be more remunerative, safe, and efficient. This process is called the Agricultural Revolution (Harari, 2011). It spread independently across the world, but evidence proved that it first appeared in the Mesopotamic area that we call "fertile crescent". Only certain animals and plants were tamable. In fact, this revolution has precise geographical and biological boundaries, as the animals were chosen for their docility and plants for their ease of harvest under certain conditions.

Scholars once argued that the Agricultural Evolution was the result of humans evolving mentally to finally discover all the secrets that rendered them able to tame natural

resources. Once they achieved this knowledge, they were more than glad to leave the harsh, difficult, and risky life of hunter-gatherers to create stable and safe settlements where to live a happy and satisfying life as farmers. Harari immediately attempts to debunk this theory. There is no proof to testify higher intelligence, deeper knowledge, less danger, and more health in the two stages of *sapiens* civilization. The great benefit that the Agricultural Revolution brought to mankind was indeed an abundance of food, which then led to a huge demographic increase. Nonetheless, this leap caused all the backslashes that were listed in the previous paragraphs. The average *sapiens* worked harder and for a worse lifestyle and diet. Nevertheless, as said, humans witnessed an exponential population growth. For example, some areas in Palestine were initially only inhabited by a few dozens of nomads. Once a farming settlement had been erected, it hosted a few thousands of humans, who however were more likely to suffer from malnutrition and diseases. Again, this appears to be a Darwinist paradox. Of course, it is an incorrect assumption. As a matter of fact, Harari explains that evolution does not care if species are starving or suffering, but instead it looks at the quantity of DNA helixes that such species succeeds in duplicating. A species, even the happiest and healthiest, if it does not reproduce, it is destined to go extinct. This was the success of the Agricultural revolution: worse conditions but for far more people. However, how could rational (and egocentric and rather hedonistic) creatures such as *homo sapiens* decide to worsen their own life condition for the unknown benefit of the entire species? Harari also addressed this matter. Before, the demographic growth of a nomad tribe was kept under control with natural and social checks. When there was abundance, people reproduced more; in periods of famine, human puberty delays by natural causes and new children were avoided also through social means, like sexual abstinence, abortion, and even infanticide. Excessive offspring could represent a huge obstacle to a moving tribe, and even one additional person to feed could be a big concern. For these reasons, to avoid bearing such an imprudent toll, there was a span of few years that divided one birth from another. Instead, with the transition to permanent and sedentary villages, and with the increase in food supply, humans were able to have

children more frequently without being a burden on the rest of the population. Moreover, two additional hands for the crops were more than appreciated. However, all these new people to feed brought the necessity to create new farming lots. On one hand, this naturally led to a steady and fast development of settlements. On the other, it brought about a vicious cycle. More work produces more food; more food means better life conditions and less risks. This was the initial beneficial logic. Better life conditions and less risks allowed for more children. Hence, population growth. The population growth eventually consumes the additional resources of the previously richer society. Thus, the extra-work that initially brought extra-food now is only able to fulfill the new demand of the growing population. Consequently, to improve again the life conditions, more work was needed over the already increased extra-work. In conclusion, the Agricultural Revolution, in Harari's words, was nothing short of the biggest scam of history. This fraud haunted humanity for all of our existence, fomenting our wildest dreams of endless accumulation. The author states that luxury tends to become necessity and thus creates new duties. It starts from a small taste, and then it usually reaches the point we cannot live without it.

We Won… But At What Cost?

The advent of the agricultural revolution is clearly one of the most important events of human history for its ramifications in the development of society. Some scholars argue that it was the turning point for *homo sapiens* to finally renounce their intimate and symbiotic relationship with nature. Rather than balancing the tribe's demands and assets with the supply of natural resources, humankind started to bend the natural limits to their own benefit. With this huge advantage over nature, the *sapiens* had the possibility to get wealthier and reproduce more, while accumulating and consume more goods at a higher rate. This decision, however, arrived with a cost. Every possibility to return to the socially healthier hunter-gatherer society was now unfeasible, as the

demographic boost rendered it unsustainable. To understand the entity of this social mutation, consider that in the tenth century B.C. there were roughly five to eight million hunter-gatherers around the world. In the first century B.C. there were less than two million left, with respect to 250 million farmers.

The consequences reached almost every aspect of human life, especially the psychological framework. For the first time, the future became the main concern of the *sapiens*. Hunter-gatherers were only interested in the present. They gave little attention to the far-fetched future. At most, they could think of the preparations for the upcoming season. On the other hand, farmers had to be constantly worried about their future. Almost all their supply of food depended on the successive months, or years. Who decided to plant olive trees knew that their fruits were available only for his sons or nephews, not for themselves. This risk-awareness led to the first forms of anxiety and distress. Whereas hunter-gatherers were distressed for the immediate future, those concerns were satisfied with just few hours of working. Once they retrieved meat from a good hunt, or some fish or fruits, they had plenty for days. On the other hand, farmers had long working days and the future was always uncertain. In addition, it was difficult to enjoy eventual present abundance, as too much inactivity could be harmful for the next harvest. Every second not spent working today meant less resources and food for tomorrow. The stress of the agricultural life had large-scale consequences. It established the ground rules for political and social mass systems. Elites and governments emerged to deprive the zealous workers of the food they had harshly collected, leaving them with the bare minimum to survive. This surplus was then used to build and sustain the new-founded political systems, with wars, infrastructures, art, towers, castles, philosophical schools, and religions. This minority of people was the responsible for the progress of society. These few people wrote the pages of our history books, while the residual majority was outside digging and ploughing.

In order to concretely center this framework of unbalanced hierarchies emerged at the birth of societies, Marx is obviously the foremost scholar to take into consideration. In

particular, it is interesting to converge the assumption of the previous paragraph with the Marxist theory of historical materialism.

According to the Stanford Encyclopedia of Philosophy:

He [Marx] developed an influential theory of history—often called historical materialism—centered around the idea that forms of society rise and fall as they further and then impede the development of human productive power. Marx increasingly became preoccupied with an attempt to understand the contemporary capitalist mode of production, as driven by a remorseless pursuit of profit, whose origins are found in the extraction of surplus value from the exploited proletariat. (Wolff and David, 2021)

From the lines above, we can ascertain that Harari's assumptions are very similar to Marx's, as elites are born out of a pursuit of profit generated by the collection of all the surplus available from the workers. This extraction, which is inherent in capitalism, is precisely a trait that is present in any form of economical society. According to Marx, the activity responsible for the supply of the human livelihood is defined as the economic labor. When an individual is not capable to survive alone, he forms communities with similar economic activities in order to optimize production. In the development of communities, it is very plausible that several different economic activities emerge. For example, imagine a community of fishermen, hunters, farmers, and merchants. Eventually, these economic activities will clash and fight to prevail in said community, in order to establish which economic labor will dominate. When the leader emerges, society is found according to that economic structure. All the other activities become subordinate and reliant on the dominant. At last, the dominance is then justified by the ruling class with the structurization of a system of values and virtues that explains the reason of their sovereignty. Thus, this *superstructure* produces discourse, language, ideologies, philosophies, politics, laws and so on. This perfectly fits with Harari's vision of a composite abstraction that causes *homo sapiens* to cooperate. However, where Marx identifies the root of exploitation and suffering of the

workers, Harari acknowledges it as the process of social evolution. Another noticeable difference is that Harari states that the economic allocation of resources is not the only fundamental value on which society relies. In fact, frequently throughout history examples of conflicts emerged while the deposits were abundantly filled with goods. For example, during the first century B.C., the republican Rome was concurrently facing a period of extreme richness and a disastrous period of civil war and internal conflict. According to Harari (2011), the problem that still causes such calamities is in our own social biology. As a matter of fact, humans evolved for millions of years in small groups of individuals. The few thousands of years that separated hunter-gatherers' societies to our own contemporary world are not at all sufficient to develop an instinct of mass cooperation. Once again, it is our capability to believe and create conventional abstractions that made us overcome our natural instincts. The basis of this mass cooperation is indeed brittle and fragile, but still sufficient to create extremely complex structures that evolved at a light-speed rate compared to our biological evolution. However, here the convergence among Harari and Marx emerges once more. In fact, these networks of human cooperation come at a price. In order to create large scale and mass societies, oppression and exploitation are almost required, at least at the birth of said societies. All these forms of cooperation were founded on the idea of a *constituted imaginary order* (Harari, 2011). Just like in the historical materialism, the social norms that supported the dominant system were based neither on social instincts nor on interpersonal relations. The key lies on the shared belief in those abstractions that not only allowed, but even justified the dominance of the ruling class, as it represented the only means to create societies. Here lies the great separation between Marx's historical materialism and Harari's theory of historical evolution. Where Marx saw the dominant economic community as the creator of the superstructure, Harari saw the most rooted abstraction. It is of utter interest to underline how neither of these two patterns of society's creation has common good as the final goal. The former seeks production and consumption, even if not socially and economically sustainable in the long run; the latter creates abstractions that are not necessarily the most ethical or

rational, but instead the most appealing and alluring. What is beneficial for everyone may just be a consequence, not the founding grounds. As a matter of fact, the Egyptian pharaohs created a kingdom that cooperated extremely efficiently and that was able to provide for its citizens. Nevertheless, if those citizens had not believed that the pharaohs were the direct descendants of the gods, the world would probably be without pyramids now. Without the divinization of the elites, it is difficult to imagine that all the Egyptians would have respected such an imbalanced hierarchy. This rationale still works in modern times. Our contemporary democratic constitutions declare to follow indiscriminately universal and eternal principles of justice, like egalitarianism, pursuit of freedom, or self-realization, and enterprise. These liberal-democratic constitutions allowed the *sapiens* to build nation-states that function extremely well and are able to sustain complex intergovernmental interactions. Nevertheless, the principles of the French revolution, *liberté, égalité, fraternité*, which are extraordinarily important for modern civil societies, are all abstract principles which are conventionally considered as supreme. They are not written in humans' genetic code, nor anywhere else. As *sapiens,* we cannot declare that those principles will be universally and eternally true and paramount. For instance, the Pharaohs would most likely disagree. They would claim that we are not equal at all, nor everybody should be free to decide for themselves. Nature itself teaches us that resources should not be distributed equally and not everybody must have the right to live a happy life. Only the fittest are meant to survive and reproduce. However, nowadays it is very hard to imagine a Western country going back to dictatorial regimes where freedom and popular representation are not central for the polity, even more so after the totalitarian European epoch.

In conclusion, equality, freedom, and unity, all principles that contemporary liberal democracies hold so dear and consider universal and inherently right, are central only because we have conventionally decided so. No principle or morality hold an objective value, common to everybody. Nevertheless, this does not mean that they must be intrinsically wrong, or false. Not being objectively true does not mean that we cannot believe in it, nor that they would serve no purpose. As a matter of fact, we believe in

abstractions and in constituted imaginary orders not because they are true, but rather because they allow us to create socially reasonable structures, complex systems of interpersonal dialogues and coherent, even if not fair sometimes, justice.

However, this assumption implies the fragility of this system. The constituted imaginary order, as it is built in our minds and not anchored to the concrete and natural ecosystem, is extremely fluid and changes along with humans' mental schemes. Nevertheless, it holds some general ground-rules. Firstly, it is nested as a subset of the material world, but it has the power to profoundly change it. Secondly, it has also the power to change our perspective of the world, our desires, ambitions, and destiny. A 1789 Frenchmen would never praise the divine spirit of a pharaoh, just like an Egyptian scribe would never die for freedom and equality. Thirdly, the constituted imaginary order is an inter-subjective phenomenon. It exists only inside the network of communication that connects the subjectivity of different individuals. If such a network is destroyed or mutated, the entire order changes or dies accordingly.

Competition Is Good, Hierarchy Is Better

In the previous paragraphs, we have built, through the process designed by Harari, the basis of the social ecosystem. The foundation, its structure, and the super-structure built upon it have been defined. The structure is defined "constituted imaginary order", while the super-structure is the social community subsequently generated, with its own principles, perceptions, rules, trends, and so on. In order for *sapiens* to finally leave the biological system and its limits behind, they applied the imaginary order as the new field for interaction with reality. Hence, having outlined the new social ecosystem, we can now move onto the according forms of Darwinism. As a matter of fact, this new ecosystem is not inherently more just or fair to the organisms inhabiting it than nature was. Here too, the subjects are constrained by the struggle for survival, now called struggle for existence by Social Darwinists, and are driven by instincts to accumulate

resources and reproduce. Social hierarchies are the result of an artificial establishment. Said establishment decides who has more probability to survive, who will more likely perish, and the rules and criteria that govern the selection. Who has a higher rank in the social pyramid has more privileges and power; lower ranks receive social discrimination, deprivation of resources and opportunities, and oppression. More contemporary forms of social ecosystems, with the emergence of egalitarian principles, allowed for less forms of discrimination, oppression, and socio-economic disparity. The struggle for survival is getting easier over the millennia. Nevertheless, we are still far from achieving fair equality, for it is still difficult to concretely define to what extent equality is fair, or even legitimate. It has changed drastically among the centuries.

In ancient times, Hammurabi stated that it was fair to treat unequally people with unequal rank. Free men had more rights than slaves. Social disparity was not only accepted, but the norm. Nevertheless, his codex is regarded as one of the most important pinnacles of human society, a milestone for our legislative culture. In modern times, where we believe in equal opportunities and entrepreneurship capacities, economical hierarchies are not only accepted, but the norm. Social inequalities are deeply rooted in the system that host them and vary accordingly. However, it is rather important that both the reason and the extent of inequalities are kept hidden, or at least, justified. An important task that the dominant societies seem to follow in every system is to strongly defend the origins of their dominance, by usually claiming that inequalities occur as a natural consequence to a natural law. Aristotle himself believed that slaves were naturally prone to be more docile, servile, and controllable than free men, who instead enjoyed a rather independent and liberal spirit. Thus, slavery was a result of society adapting to humans' different personalities. Slavery, in other words, is seeded in some humans' own nature. Those who enjoy more initiative or resourcefulness, inevitably will turn out to be free men. On the other side, others seem to be born to be slaves by nature.

Indeed, it is paramount that the causes for any kind of discrimination and inequalities appear rooted in the natural world. The moment the oppressed classes realize the fragile

and fictitious reason of their oppression, there would likely be an insurrection and a systematic change of society. It is ironic how the same people who strongly foster the proposition that humanity lives in a constant cycle of struggle and competition, where only the strongest are meant to survive and thrive, are also the ones that are deeply concerned with stopping the cycle when they are on top of the social pyramid. To do so, the dominant class must justify their position with all the means possible. They will tend to base this assumption of merit as the consequence of universal concepts. For instance, it is easy to find in history several examples of rulers chosen by God, noblemen that inherited the glory of mighty ancestors, or even individuals that are the embodiment of ideals and beliefs. When the system appears solid to the mass population, it is likely to endure. However, if citizens are not committed to or convinced by the cause of domination, the rulers, with their system of dominance, might fall. This process of class consciousness is described thoroughly by Marx, that in fact was positive that a proletariat revolution was just a matter of time.

Complex human societies appear to need imaginary hierarchies and unjust discrimination. Of course, discrimination may vary on regards of the moral spectrum and the violence with which it is maintained. Yet, no scholar has ever found any type of structured society that does not have embedded some kind of discrimination. The categories with which humans are classified may vary based on their social position, physical traits, military ranking, wealth and so on. According to Harari, they help regulating the relationships among millions of humans defining who is superior and inferior, on the legal, political and social level. The scholar asserts that hierarchies are useful as they may function as social clues. They ensure that people immediately know how to treat other individuals properly. Regardless, in the majority of cases, hierarchies are born as the outcome of historical events and the eventual cultural appropriation and assimilation, with each passing generation having different desires for its preservation (Harari, 2011).

One on the most effective ways to prevent the disruption of rigid forms of ranking was obtained with the concept of contamination. This principle is strongly related to the

primordial fear of diseases and danger. Noble families used to share the principle that they should keep a pure bloodline to maintain their aristocratic status. They did so by avoiding any contact with those who could endanger their *purity* by bringing elements of contamination in their bloodline. With this belief, social segregation among classes was thus justified. Regardless of its absurdity, it appears logical, easily understandable by society, and thus effective. Another example is found in the African slaves deported to America. Their physical prowess, mixed with a certain degree of immunity to those diseases that instead were extremely dangerous to white Europeans, made them the best slaves possible. Hence, paradoxically, their biological superiority was the reason for which they were oppressed socially. However, the strong sentiment of racism and imperialism, widely shared among the Europeans, created the narrative of a *superior* race justified to enslave the *inferior*. This is yet more evidence of how social constructions completely overcame the biological traits. On the other hand, there is another line of thought that can be drawn. There could be a reason why stronger manual labors are usually at the bottom of the social pyramid, while who is at the top usually covers organizational tasks. The theory explains that this socio-political disposition reflects the way *homo sapiens* survived and thrived. If humans had continued to rely on their raw strength for survival, it is indeed very plausible that the species would have remained very low in the food chain, and still be stuck in the first biological and natural ecosystem. Instead, the mental and social capacities of some *sapiens* let them climb the food chain to its apex. Hence, those with more developed social and organizational skills inevitably stood at the top of the social pyramid. Again, because the social ecosystem is embedded in the natural ecosystem, it is easy to trace resemblances among the two worlds.

At last, we must understand why social inequalities are nested in *all* social systems, whether they are designed by humans and animals. As a matter of fact, designating an authority that should lead the group is not a human invention. Different species of social animals all tend to identify an "alpha", male or female. To this authority, depending on the species, the other members of the group show deference or some

sorts of subordinate behavior. Alphas may enjoy preferential allocation of resources or access to mating. In some species, only alphas are allowed to reproduce. Usually, the way to reach the alpha position is through violence: with physical superiority or because of a more violent or aggressive nature. However, there are cases of ranking based on social capabilities. Some species design the alpha through social efforts and building alliances within the group (de Waal, 1982) or simply by breeding and being the parent of all the pack (Letzter, 2016). The latter is the case of queen bees. The reverence with which the queen bee is treated is almost religious. Worker bees constantly surround her and satisfy all her needs, from giving her food to disposing of her waste. However, her role is simple but fundamental for the hive, as she is the main and sole reproducer. Thus, the reason for inequality is quite rational and logical. Physical strength, aggressiveness, and fertility, for example, are all traits that the group must share as much as possible to ensure survival. Thus, it is vital that the alphas have better food and more chances to reproduce. The health and wellbeing of the alpha is translated to the health and wellbeing of the entire group. Inequalities are accepted by the whole community because they make everyone better off. Thanks to a heavyset Silverback Gorilla becoming an alpha male, we were able to summarize a farfetched version of the Rawlsian Liberal Egalitarianism. However, how does this apply to human society?

Four Legs Good, Two Legs Bad

With the rise of civilization and the advent of the first human settlements, forms of economic, social, and political inequality soon emerged. Unlike the social animal kingdom, the *homo sapiens* disparities were much wider and not necessary for the benefit of the whole community. So, how is it possible that more rational and socially organized creatures could develop social structures that treat individuals so drastically unequally? Wolves in a pack would never accept voluntarily to be so submissive to the alpha. Is there a concrete or pragmatic reason that justifies seemingly insurmountable

social hierarchies? Or were the sheep right in the aforementioned Orwellian *Animal Farm,* by stating: "four legs good, two legs bad"? Is the core reason for discrimination simply embedded in human nature?

As stated, it is the creation of constituted imaginary order that is used to justify and conventionally accept such disparities. In the *homo sapiens'* social interaction arena, there are different ways to achieve the apex of the food chain. As said before, it may be through organizational and leadership skills, or wealth for instance. A society may "deify" a newborn child because of a particular birthmark, pay handsomely an individual for his particular athletic skills, or grant privileges to a particularly appealing specimen just for being attractive. It is the constituted imaginary order that dictates which traits are required to rule. Rationality and pragmatism are not necessary for such a creative species such as the *homo sapiens.* In fact, our fertile imagination is all that is needed in order to give inherent value to something, or someone, that concretely may hold little.

Through history, humanity has witnessed ideals of freedom and equality emerging as the dominant narratives of the Western world. Indeed, different historic events brought to the evolution of egalitarian principles, which granted gradually larger groups of individuals the same rights and privileges. The process to reach universal suffrage required centuries of vote limited to smaller groups and elites; liberal and social democracies had to witness oppression, world wars, and the nightmare of left and right totalitarianisms; civil rights in the U.S.A. were possible only a few decades ago. Social segregation is still in the memory of some of the elderly. Nowadays, we still cannot assert to have reached full social equality among all citizens.

This long process claimed many victims, and it still is. Even though legal equality is almost taken for granted, there is still a heavy inequality of opportunities that divides classes, ethnicities, genders, etc. Economic differences, which especially in liberal economies are translated almost entirely to opportunity differences, are at a record high. The pandemic crisis highlighted these differences even more. Stanford Professor

Nicholas Bloom (2016) has declared on New York Times: "[Inequality] is truly a global phenomenon, and I don't know any serious economist who would deny inequality has gone up. The debate is over the magnitude, not the direction". Furthermore, University of Bologna Professor Riccardo Leoncini (2016) commented on an online platform, debatingeurope.eu, the association between social inequality and political instability.

He stated: "*From my point of view, inequality by itself does not give rise to political turmoil. There are lots of psychological studies showing that people do not actually realise how unequal the society they live in is. For instance, I have seen an article from psychologists that were asking people in the US how much money they thought CEOs should earn with respect to workers. And the panel of citizens estimated that the current CEO-to-worker pay ratio was 30:1, and that, ideally, it should have been 7:1. What's the reality? The reality is that the average CEO earns 354 times what his or her workers get.*

The second reason is that we have 'The American Dream'. The idea of the 'self-made man' is an important fantasy for many people. And these are two reasons why inequality is not an issue that will give rise to political unrest. Furthermore, and this is something that many other economists have been pointing out, the control of the media is crucial. Since the top 1% also controls the media, they control what is being said on inequality." (Leoncini, 2016)

This is completely coherent with both the constituted imaginary order principle and the will of the dominant classes to avoid social consciousness among society. The latter prevents eventual political turmoil by keeping the population unaware of the true condition of inequality. It is in the best interest of the dominant class that lower classes are not conscious of the magnitude of disparity, and most of all, of the effect of wealth and social redistribution. Secondly, with the sentiment of self-reliance and self-realization rooted in the so-called "American dream", the cultural superstructure justified sufficiently the emergence of these colossal disparities. Instead, for what

concerns the Rawlsian principle of Liberal Egalitarianism, where inequalities can be tolerated if they have a positive effect on society, the professor continues:

"The idea that inequality has a positive impact on economic variables is probably one of the main reasons why people think a certain amount of inequality is good for societies. But all the data shows that the more unequal a country is, the less long-run growth it experiences. There is a negative relationship between inequality and growth. So, the idea that inequality is a sort of incentive for people to become richer and richer and richer doesn't represent a universally-held attitude among economists. In the vast majority of countries, inequality is a sort of obstacle to the growth of income." (Leoncini, 2016)

Even if the magnitude of inequality tolerated by the lower classes is related to the strength of the constituted imaginary order in people's mind, it is however counter-productive to society as a whole. Indeed, inequality is a type of market failure, as it is an inefficient allocation of resources in the free market. Yet, for how negative the impact on the overall society is, the system's structure allows it. Thus, we can concur once again that the constituted imaginary order has the power to overcome not only humans' biological limits, but also their psychological perceptions and rationality.

On the other hand, egalitarianism is not at all the only central tenet of human society. The prolific creativity of *homo sapiens* permitted for several diversified constituted imaginary orders. Some may not be interested in equality or freedom at all, but rather in loyalty, honor, preservation of life, etc. Indeed, these different principles created the variety of political structure that has existed throughout history. Each order describes the criteria of adaptation of the organisms living in it. Thus, translated to the natural world, each constituted imaginary order represents a different ecosystem. Just like it is possible to study the climate of a macro-ecosystem or the circle of life of the insects on a single branch of a tree, we can take into analysis the social customs of an entire nation composed of tens of millions of inhabitants just as we can study the social habits of a nuclear family of four or five members.

Every individual is at the center of multiple and concentric constituted imaginary orders that widen in response to the focus of analysis, just as all individuals live in concentric natural ecosystems. These overlapping worlds may have perilous effects on individuals, as they may be unfit to one or more of these multiple social environments. We have stated more than once how powerful a social imaginary order can be over individuals' existence. For this reason, scholars of the past have adapted the concept of Natural Darwinism to the social arena of interaction. These scholars took the name of Social Darwinists.

Struggle For Existence

"Most of the scholars of the earlier generations subscribed to the notion of natural rights and believed that all men were born equal with certain natural and undeniable rights that could not be taken away. But Darwin discovered the law of survival of the fittest, which implied that equal rights are illusionary. Rights were not natural, nor guaranteed, but acquired. Thus, only the strong and powerful could assert their rights. This view was revolutionary and applicable to both individuals and states." (Liang Qichao, 1900)

The journey Charles Darwin took on the *Beagle* from 1831 to 1836 became legendary in the history of humanity because of the discoveries it had unveiled. We have profusely discussed and explained the essence of Darwin's findings regarding the natural world in the first chapter of this dissertation. However, it is now the time to discuss how Darwinism affected the political and sociological sphere too. Indeed, while writing *On the Origins of the Species,* he already knew the impact his discoveries would inevitably have also on other fields of science. For this reason, in 1871 he published a volume completely dedicated to the evolutionary theory applied to man: *Descent of Man, and Selection in relation to Sex.* In this publication, he touched several topics, such as evolutionary psychology, evolutionary ethics, and the effect of the

evolutionary theory to society. In addition, he dwelled upon the theory that human races were indeed categorizable and also ranked qualitatively. This assertion resulted only after his trip to South America. In fact, during the voyage, he passed by the southernmost tip of South America, Tierra del Fuego. There, he witnessed the presence of the natives, referred by him as savages. Their behavior and standard of living deeply astonished him.

"The Captain sent a boat with a large party of officers to communicate with the Fuegians.— As soon as the boat came within hail, one of the four men who advanced to receive us began to shout most vehemently, & at the same time pointed out a good landing place.— The women & children had all disappeared.— When we landed the party looked rather alarmed, but continued talking & making gestures with great rapidity.— It was without exception the most curious & interesting spectacle I ever beheld.— I would not have believed how entire the difference between savage & civilized man is.— It is greater than between a wild & domesticated animal, in as much as in man there is greater power of improvement." (Darwin, 1871)

The quite interesting last sentence underlines a particular assessment. Before his voyage, he held that all human races were fully human in their capacity for civilization. After the narrated episode, he believed that some populations, in particular the *savages*, were "incapable for civilization" (Darwin, 1871), and thus were to be considered as the missing link that connected humanity to lower animals. Hence, after his travel, Darwin himself believed that there were two, if not more, stages of human development. The European Whites, of course, had to be considered the last step of evolution, as their degree of civilization proved their inherent superiority. Thanks to this line of thought, a new stage of sociology started. Herbert Spencer, one of founders of this new movement, contended that the same principle that concerned Natural Darwinism, the *natural selection*, had to be applied to improve society as a whole. He asserted that different policies had to be fostered in order to implement this vision. For instance, in his opinion, schools should focus only on the individuals with highest potential. For instance, he considered public schools "a monopoly for mediocrity" (Spencer, 1851),

because of their universal admission of students. In other words, the struggle for survival should inspire societies to treat the unfit as an inferior species that should be left out for society's sake. The unhealthy, the imbecile, slow, vacillating, lesser members should be excreted by society (Spencer, 1851). This purifying process, then called *struggle for existence*, will prevent human extinction, he stated. Darwin's evolutionary theory thus became the pillar of this new branch of science that proclaimed to rank races by their inherent value.

Evolutionists considered people of color, criminals, and the disabled as examples of lower stages of human evolution. However, this line of thought holds some discrepancies. As a matter of fact, those that Spencer calls "unfit", are such only in the system his society was designed on. Intellectual inferiority, to a certain level, is just a matter of circumstances. Civilized *homo sapiens* are simply more adapted to the society they have created, but not necessarily more capable. For instance, as it has been mentioned before by Harari (2011) in this dissertation, humanity used to be generally smarter during the hunter-gatherer stage. They were more creative, had wider general knowledge, and were more skillful and resourceful. On the other hand, they certainly were less civilized. This would represent an incompatibility with Social Darwinists' thinking. Being unfit does not inherently mean to be inferior. However, Spencer was well aware of this relation. As a matter of fact, he stated:

"*The law is the survival of the fittest.... The law is not the survival of the 'better' or the 'stronger,' if we give to those words anything like their ordinary meanings. It is the survival of those which are constitutionally fittest to thrive under the conditions in which they are placed; and very often that which, humanly speaking, is inferiority, causes the survival.*" (Spencer, 1872)

Inequalities are not universal, but circumstantial and discrete. In other words, they are generated only after the creation of the ecosystem, or the social structure. If it is true for Natural Darwinism, it would be contradictive for it to be false for Social Darwinism. Social structures define the human food chain, thus creating hierarchies and

inequalities. In the Spencerian Social Darwinism, the social structure must have the purpose to eliminate those who may harm the human potential. The main goal must be the pursuit of the "better man". This selection is achieved, and thus justified, through laissez-faire capitalistic competition, nationalism, imperialism, and eugenics. Thus, the Spencerian social ecosystem considers those located in the lower positions in the food chain as qualitatively inferior and destined to disappear. However, this is not always true in nature. A lower position in the food-chain does not automatically mean that organisms hold less value or importance. Each element has its function in the ecosystem. An eagle cannot survive if the rodent goes extinct. Likewise, once the position of "the eagle and the rodent" are defined by the constituted imaginary order, they cannot survive without one another. As said, the health and resilience of an ecosystem is usually linked to a balanced variability of organisms and species diversification. Likewise, a healthy social arena requires the interaction of different organisms, that do not need any ranking to exist. The resilience of the social ecosystem relies on the diversity of its elements, not on the quality of the organism living in it. Thus, there is no need for a *übermensch*" if it requires the sacrifice of other individuals. For instance, that is why totalitarian regimes are so dangerous for the social world. By not allowing any other type of abstraction but the central one, the entire social ecosystem will inevitably become extremely fragile and non-resilient. This is the reason why a great amount of violence and discipline are required to keep it functioning effectively. On the contrary, Social Darwinists argued that the extinction of what they believe to be the inferior forms of humans, and thus the final emergence of a single race of superior beings, will foster social evolution and civilization. Darwin himself had foreseen the fate of the *savages*.

"At some future period, not very distant as measured by centuries, the civilised races of man will almost certainly exterminate and replace throughout the world the savage races" (Darwin, 1871)

We should focus carefully on this statement. Of course, nowadays this kind of assertation should be considered, hopefully, abject and vile. This narrative is surely one

of the roots of modern days systematic racism, a despicable example of white supremacy's alleged superiority and the typical imperialism tenet embedded in the Western world. But it stands uncorrected. This historical process indeed happened. The *savages* gradually started to disappear over the centuries. Only few cells of tribal communities still manage to survive today, like the Sentinelese we have mentioned before. Of course, Darwin, who saw this extinction on the biological scale, was only proven true on the social level. The civilized race he refers to is clearly the Western world, that succeeded in spreading its constituted imaginary order across the entire globe over the centuries. In fact, whether we like it or not, globalization and westernization are undeniable phenomena that spread, with different magnitudes and questionable means, in almost every other constituted imaginary orders. In fact, it was not the "savages" who went extinct, but the culture they represented. Not the biological beings, but the social world they had created. As we have said before, social structures are only apparently solid and everlasting. In reality, they are quite flexible and fragile, and tend to transform or to be absorbed. Indeed, consider a hundred-year-old German man born at the beginning of the 1900s and who died in the 2000s. He would have lived through five extremely different social structures. He would have been born during the William II's Kaiser; he would have lost the first world war and spent his young adulthood in the Weimar Republic; then, he would have witnessed the rise and fall of the Hitler's National Socialist German Workers' Party; then, at the end of the second world war, he would have seen his country be parted amongst liberal democracies and Soviet communists; and lastly, he would have died in the unified Federal Parliamentary Republic of Germany. Now consider if this German had been a Jewish and imagine how his rights would have shifted over the years. For instance, the social structure around him changed, and so did his position in the "food chain" and his role in the constituted imaginary order. It is difficult to concur that every step forward is the exemplification of human evolution and progress. A new constituted imaginary order replacing an older one is not always an improvement, as Social Darwinist may assess. However, regardless of the positive or negative outcome of the

events, this historical process is indeed inevitable and part of the struggle of existence. The social environment thrives because of this cycle. It generates the variegated mixture of cultures, the inceptions of new elements and social organisms. For instance, the emergence of totalitarian regimes prompted the creation of institutions that foster freedom and equality.

To sum up, Social Darwinism imply that the struggle and selection of the animal realm concerned also the progress of human society. Up to this point, this assessment complies with the proven and accepted forms of Natural Darwinism. However, allowing a politically guided social cleansing is, first of all extremely unethical, but also in contrast with the same principles of natural selection. Rather, it is a precise application of *artificial* selection. For example, following the eugenics theories of Sir Francis Galton, cousin of Darwin, human race will advance by maximizing the efficiency of mating. It is easy to understand how this process is far from being natural, as it is a forced form of breeding, with a questionable selection of the "most-fit" for reproduction. Thus, the conception that inequalities and oppression in Social Darwinism were justified by natural evolutionary laws consequently falls. Again, we are facing a constituted imaginary order that attempts to justify its own propositions by linking them to universal and natural foundation. As a matter of fact, the assumptions fostered by Social Darwinism were soon critiqued by scholars that attempted to create a reformed Darwinism already in the 1880s. For instance, in Robert Bannister's work on Social Darwinism, he expressed the historical transition and the eventual set of this sociological rationale:

"*Stressing the importance of intellect and culture in human evolution, activists demanded increased government regulation; new efforts of social welfare and control; and a more positive role for America abroad. Attacking the brutal laws of Social Darwinism, they grounded their activism in the nervous perception that natural forces, if left alone, were evil and destructive. Socially, this perception helped generate a decade of progressive reform. Intellectually, it fostered significant departures in sociology and social science. After the war, of course, serious thinkers almost*

universally abandoned the evolutionary framework entirely in favor of cultural, ecological, or behavioristic models." (Bannister, 2010)

The Mirage Of Universalism

At last, how should all these different social ecosystems interact with each other? Indeed, ideological conflicts are almost a constant in human history. Unlike the natural ecosystem, that requires a rigid adherence to biological laws and limits, the social ecosystem, as we have seen, is very versatile and flexible. It is impossible for two natural environments to collide or coexist, and the organisms may have extremely hard time to survive if thrown in a completely new environment. The boundaries from an environment to another are quite clear and solid. Once again, we have proven that this is not the case in the social world. History has proven that the overlapping of different constituted imaginary orders is almost inevitable, and the boundaries tend to bend to human desires. Whether this results in a positive interchange or a ruinous conflict depends on the nature of the orders involved. It is important to note that, even if common, conflict is not absolutely necessary. For instance, the development of the globalization and multiculturalism phenomena proves how cultures are starting to merge much faster and more easily than before. Again, it may be possible to hypothesize a single and universal culture, generated after a willing and positive annexation and absorption of all the social cultures that compose the global ecosystem. In a study conducted by Sarah Anyang Agbor (2015) the author precisely wants to address this issue. In fact, the study precisely claims that, even if created with the best conditions and intentions, a single universal culture is not desirable for the global polity.

"Culture and ideology have blended together such that language traditions; imagery, myths and beliefs have been integrated into literary works. Cultural boundaries have been broken and borders have become elastic such that culture as a means of survival

has become transnational and translational. Thus, a hybrid culture has evolved, and multiculturalism seems to have moved beyond the mere combination and cohabitation of different cultures to describe the growing phenomenon of cultural annihilation which results from the collision of cultures producing the first signs of a future universal culture. The birth of this universal culture passes inevitably through the ideological flux that characterizes this age of globalization." (Agbor, 2015)

The principle guiding the perilous effects of a "mono-culture" is the same applied to totalitarian ideologies. They are dangerous as they do not accept or allow other abstractions. It may be plausible to find moral, ethical, or socio-political values that are shared among most of the human cultures. On the other hand, it is highly unlikely that such values are prioritized in the same way everywhere or are even applied identically. The author proceeds advocating this same view.

"What are the social, political and economic implications of the elements of cultural plurality in a developing country? Is a nation a mere geographical expression? We argue that an outward-looking cultural identity—one that rejects the fixities of locality and embraces the fluidity of the universal—makes cultural diversity not only more acceptable but also desirable; in that cultural identity makes global polity more acceptable." (Agbor, 2015)

The author claims that different steps must be taken beforehand. Firstly, drop the notion that cultures are geo-localized. In order to grasp the concept of global identity, one should recognize their own identity outside geographical or cultural borders. Thus, the first requirement is a degree of cultural fluidity. Global identity resides in the diasporic citizen. Secondly, the spreading of just the European culture is not the right way to achieve a global culture. This phenomenon is nothing but a form of cultural colonization, whose purpose is cultural annihilation rather than inclusion. The new universalism requires the synthesis of cultures detached from previous boundaries, and not the imposition of a "stronger", or rather more aggressive, culture. That would be the realization of Social Darwinism, that we have already defined as not ideal.

This type of culture will thus be inclusive, as it survived those traditional philosophies that treated differences as deviation from a standard; it is circumstantial, as it does not seek general truths in the forms of universal subjects, classes, or cultures; it is hybrid, everchanging, indefinite, and indefinable, as it is not fixed but in permanent construction. Indeed, it may seem unbearable or even unfeasible to the eyes of the typically subject-centered traditions. Nevertheless, it is reaching this position of humility and openness towards diversity that creates equality and fair social cooperation. Pier Paolo Pasolini (1976), in his works *Lettere Luterane,* precisely describes how accepting "differences" cannot be truly possible in a subject-centered tradition rooted in a consumers' society. In said conditions, only tolerance is possible, which however holds the same principles that characterize judgement, and, for instance, intolerance. Pasolini states:

"Tolerance, you must know, is only and always purely nominal. I do not know a single example of real tolerance. That is because real tolerance would be a contradiction in terms. The fact that someone is 'tolerated' is the same as saying that he is 'condemned'. Indeed tolerance is a more refined form of condemnation. In fact they tell the 'tolerated' person -let us say the negro whom we have taken as an example to do what he wishes, that he has every right to follow his own nature, that the fact that he belongs to a minority does not in the least mean inferiority, etc. But his 'difference' - or better, his' crime of being different' remains the same both with regard to those who have decided to tolerate him and those who have decided to condemn him. No majority will ever be able to banish from its consciousness the feeling of the 'difference' of minorities. I shall always be eternally, inevitably, conscious of this. So certainly the negro will be able to be a negro, that is to say, will be able to live out his 'diversity' freely, even outside the physical and material ghetto which in the days of oppression was assigned to him. Yet the mental picture of the ghetto lives on invincibly. The negro will be free, will be able to live normally without obstacles to his difference etc, but he will always remain inside a 'mental ghetto' and woe betide him if he should leave it. He can leave it only on

condition that he accepts the point of view and the mentality of those who live outside the ghetto: that is to say, of the majority"

In conclusion, universalism's and global identity's purpose is to create a macro-environment that may envision all different kinds of constituted imaginary orders. As the natural ecosystem implements macro-parameters that distinguish a fertile and habitable planet from a sterile and dead one, universalism may be the global fruitful social macro-ecosystem, that is however different to totalitarianism. As a matter of fact, the conditions of existence of such a social fundamental structure avoids the creation of absolutism aprioristically. Universalism, as stated before, asks for inclusion, circumstantiality, hybridity, and perpetual change. In Pasolini's passage, it is the expression of the majority, hence the dominant constituted imaginary order, to design inequality. The solution is the abruption from the necessity to build a dominant majority and the awareness of the equal condition of invariable particularism. We constantly live in the minority of someone else. Following the same ironical conclusion that universalism relies on particularism, it is fair to affirm that we are thus all equal in our differences as *homo sapiens*. In conclusion, by refusing to violently express a cultural identification, which we have seen is always tied to a fragile abstraction, individuals are free to interact with one another without creating means for inequality or struggle for existence, thus disrupting Social Darwinism. In other words, by being aware of the flexibility of our social identity, we are much more resilient and able to rebuild our beliefs. The inevitable tides of the everchanging constituted imaginary orders will test our cultural values over and over, easily scraping off the weak tenets we stood on and reinforcing the ones that remain. Hence, this could create a harmless and positive Cultural Darwinism, where humans adhere to the changes of social principles just like nature accepts the mutations of biological organisms.

Chapter III: The Creation of Hyper-Reality

At the end of the last chapter, the creation and development of social structures and their flexible nature has been defined. In addition, by re-adjusting the imperialistic and even arrogant essence of Social Darwinism, a new form of Cultural Darwinism has emerged. In this new system, the cultural identity of each individual is not fixed, but changes and mutates according to the constituted imaginary order. Thus, just like natural organisms survive only if adapted to their environment, the social organism must be able to adapt to the ever-changing social structures.

With the advent of globalization, the rate of social change has become even swifter, as cultures can interact far more frequently than ever before. Indeed, the eclectic job market and the possibilities granted by fast, cheap, and large-scale international transportations allowed people from all around the world to travel and work in different countries in extremely short time. Another fundamental factor to enhance globalization was the development of new forms of communication. After the emergence of social media and the web community, every individual on earth with an internet connection is able to interact and communicate with any other *homo sapiens* in matter of seconds. Indeed, long-distance and instant communication was one of humans' deepest ambitions since civilizations started to arise. The number of possibilities it opens and unveils is almost immeasurable. The first thought would go to the governance advantage, for its strategic political-economic or even militaristic value. For instance, the *Arpanet network*, Internet's forefather, was born to protect the data stored in military bases computers. However, the true value of this mass-communication was the impact it had on average citizens. With regards to media, it drastically changed their scope of action. If before they were almost completely framed in the national border, technological innovations allowed the creation of globalized media and platforms.

Digital media originated as an evolving process of economic and cultural globalization started in the 1970s. This new multipolar system of information allowed for

transnational and multidirectional exchanges and socio-cultural interactions for everyone. In other words, for the first time in history, cultural identities defined by the different constituted imaginary systems were connected with an unprecedented ease. Except for few cases of digital segregation, the flow of information overcame national and cultural barriers, thus merging and stratifying cultural structures far more freely and flexibly.

An Imperfect Prodigy

In *Internet and Democracy in the Network Society* (Van Dijk and Hacker, 2018)*,* Internet is described as a special medium with the following characteristics:

- Interactive medium that departs from the one-sided communication of traditional mass media;
- Active and creative medium enabling users to transform from viewers, listeners, and readers to participants;
- Direct medium in which individual users determine at a distance what happens in the center (e.g. politics and mass media supply)
- Platform on which everybody is equal in principle as assumed expertise has to prove itself before being accepted;
- Peer-to-peer medium enabling the collective creation of production online, not primarily by individual authors or businesses.

The core structure of this new global network arena may seem quite similar to the universalistic proposition stated at the end of the previous chapter. The egalitarian principle at its basis is something a typical western civilization must consider as a paramount achievement. In addition, the creation of content produced by a peer-to-peer exchange, highlights the liberal principles of conflict avoidance and positive trade. At last, the power of the digital world to share information and opinions at distance, yet

functioning as a closely united group, calls for the praise of those who strongly believe in the benefits of a participative, pluralist, and plebiscitarian democracy.

However, all that glitters is not gold. Egalitarian propositions are indeed fostered, but not always applied. A plebiscitary and pluralistic democracy through the internet must be unfortunately considered only theorical. As a matter of fact, information available is not actually freely and equally distributed among users. This is not the design of a malevolent genius of course, but the only way to make Internet workable. For instance, the traffic of information passing through the internet is so big that platforms must manage which user receives what information. Unfortunately, this operation is used mostly for commercial purposes and not just for technical and neutral regulations. Platforms stir algorithms to pass not only what users are interested in, but also what they *could* be interested in. Platforms study data collected by users so they can also pass political and commercial messages in the way that it is most personally appealing to each single user. Thus, the final user cannot say to be equally and fairly informed, as information itself reaches them through biased operations, which are usually classified. As stated by Aswin Punathambekar (2019), in the work Global Digital Cultures:

"Without a doubt, the question of digital platforms' democratic and demotic aspects— the ongoing debate over the extent to which digital platforms shape news and information flows (e.g., rumors, fake news)—is a crucial one. We know that such moments of participation are never entirely autonomous from the interests of the state, media corporations, and various religious, political, and civil society groups with their own vested interests. What such cases suggest is the potential for quotidian digital media use to move beyond a particular media event or location into other." (Punathambekar, 2019)

Moreover, there are some requirements to access platforms that may exclude certain propositions, thus precluding the fundamental conditions required by Universalism. In fact, every media network operates with special protocols that become standardized.

Without common standards, people are not able to communicate in a network. Thus, models can be created to exclude those situations that do not fit with the standards. Consequently, the digital world is characterized by totalizing scenarios, which is ironically typical of the unleashed liberal capitalism. As a matter of fact, a globalized liberalism will inevitably start to produce economic colossal entities who eventually start to absorb the market in totalizing ways. For instance, in the digital world, we can think about Amazon with regards to e-commerce; Facebook or Instagram for social interactions; Google for web research. The structural effects explain that the strength of a network is dependent on the attractiveness of the medium concerned, which itself depends on the number of users utilizing it (Van Dijk and Hacker, 2018). Hence, the totalizing strength of the mentioned entities increase as a virtuous circle. They become stronger as people join, and people join because they are becoming stronger.

These protagonists create a resemblance to the Social Darwinist desire for a totalizing constituted imaginary order. Their ambition is to be a take-all winner that redesign the digital arena to their own benefit. By becoming the only competitor, the totalizing entity has the power to mold the digital arena according to their own models and standards. Nevertheless, we have proven before that totalizing and omni-comprehensive models must be avoided, as they are harmful and inadequate for our cognitive tools for understanding reality. No model can truly represent and satisfy the whole reality that the imaginative creativity of *homo sapiens* needs. Indeed, the result of this discrepancy between our imaginary need for difference and the creation of totalizing models is creating uncertainty and complexity. In other words, when a model is conventionally chosen as the principal to follow, we adjust reality according to it. The more we tend to do so, the more reality will start to merge with the model, becoming totalitarian. For this reason, the more we stick to just a model, the more other models become ineffective and imprecise. However, the process mentioned is extremely violent towards diversity. Therefore, every ideology that prioritizes freedom inherently prefers variation and diversification to uniformity and conformism. As we have stated before, the health and resilience of a natural ecosystem is usually linked to

a balanced variability of organisms and species diversification. Likewise, a healthy social arena requires the interaction of different organisms, that do not need any ranking to exist. The resilience of the social ecosystem relies on the diversity of its elements, not on the quality of the organism living in it. At last, we can expect that this same principle applies to the third and last arena of human interaction, otherwise called digital world. Thus, the passage from a model to another, which hence avoids its totalizing counterpart, allows the *homo sapiens* to explore other points of view and analyze reality from different perspectives.

Totalizing entities exercise their power through conformity to their models. Their foremost interest is to control the standards applied in the digital arena. Therefore, digital giants are usually conglomerates with dispositions for different application on the digital world. They create their own research engine, their own social platforms, their own digital currency, chat or video-chat platforms, and so on. In short, just like the constituted imaginary order, when the network's standard is accepted by many people, it gives it power.

"*Most of the time one of the software standards is dominant and serves as a virtual standard with the power to influence the potential operations of the users. The struggle of power is intensified by the fierce platform competition* [of the abovementioned entities] *trying to become the dominant supplier of all these instruments: operating systems, browsers, and search engines*" (Parker er al., 2016; Van Dijk, 2012).

In addition, by having control on their standards, social media platforms can enforce policies and bans. This is certainly worthy of attention. A paramount example must of course be the permanent ban of former United States President Trump's twitter account[1]. It is universally known that his political force and strategy strongly focused on the use of the social media, especially twitter. Social media have indeed become the most important platform and media for political communication. When Trump

---

[1] Facebook has also currently banned former-President Trump's account for two years for the same reasons (6th June 2021).

allegedly incited his supporters into rioting at the Capitol Building, with a threat to do it again soon later, Twitter decided to act. In the words of Twitter's Chief Executive, Jack Dorsey (2021), *"After a clear warning we'd take this action, we made a decision with the best information we had based on threats to physical safety both on and off Twitter."* He clearly states that he does not feel any pride in such action and is also aware of the dangerous ramification of the decision. Nevertheless, *"I believe this was the right decision for Twitter. We faced an extraordinary and untenable circumstance, forcing us to focus all of our actions on public safety. Offline harm as a result of online speech is demonstrably real, and what drives our policy and enforcement above all. That said, having to ban an account has real and significant ramifications. While there are clear and obvious exceptions, I feel a ban is a failure of ours ultimately to promote healthy conversation. And a time for us to reflect on our operations and the environment around us."* Obviously, it is a controversial matter that has been debated for long. For what concern this research, it is a demonstration of the power of social media. It is now fair to say that online platforms are indeed arenas of interaction. They are single and separated ecosystems where users are able to communicate, share content, and interact with each other. Each single online platform creates the parameters of usage, rules, habits, and constitution. Users adapt to each platform according to its requirements, by changing their behavior depending on the media.

The Hyper-real Self

However, before describing thoroughly the essence of the new digital world, it is appropriate to give a proper definition of the main character of this new arena. Once again, the protagonist is indeed the *homo sapiens,* but in another guise. In fact, the new digital creature does not reside in the natural world. It does not have an identity existent in the real world, with biological needs, flaws, desires, or interactions. Neither it is tied to strict or strong socio-political and cultural beliefs. The digital identity is "*hyper-*

real", and so is the digital world. The digital identity is nothing but the projection of what each human being declares to be through their actions and decisions. It does not need validity or substance, as it is the digital embodiment of an ideal affirmation. The *hyper-reality* transcends spatial dimension. For this reason, is not embedded to any kind of previous natural or social boundaries. Rather, it exceeds them. We cannot imagine a global net if we still anchor an Italian internet user to the Italian soil. Any user exists as it is tied to a network created with the interaction with other users.

Indeed, this is one of the principal similarities with the social world. We have stated in the previous chapter some ground rules of the constituted imaginary order. One of them was that the social order is an inter-subjective phenomenon. It exists only inside the network of communication that connects the subjectivity of different individuals. If such a network is destroyed or mutated, the entire order changes or dies accordingly. The digital network is the same. However, they part ways as the digital network also legitimizes the existence of the user. In fact, as the digital user does not hold a spatial and objective dimension external to the platform, it exists only in the digital network. Without the latter, neither the former would exist. And the latter, is only constituted by the participation of the former with other users.

However, this approach goes against objective limits. During an online conference called *Filosofia del Digitale: il Mondo e le Sue Trasformazioni* (Ferraris, Tagliagambe, Durante, De Toni, Taddio, Giacomini, 2021)*,* these limits have been taken into account by Università di Sassari Professor Silvano Tagliagambe. The digital world is based on data. Said data transmits and transports information, which cannot exist without material support, which however inherently changes the data transported according to the structure of the support itself. This is nothing but the basic Kantian approach over knowledge, that change forms dependently on the receiver of said information. For instance, what I see as a tree, a bat may see a sonic wave. Both are true aspects of the tree's essence, even if extremely different. The different support structure corresponds to the different schemes natural beings use to interpret reality. In other words, in the digital world, an information may refer to different support structures, and may be

interpreted differently depending on them. Thus, as data is so diversified, the digital arena requires an epistemology approach. It cannot exist by itself, and neither can it hold fundamental categories. It changes according to the support or structure that forms it.

Indeed, the digital world appears to be nothing but registration of data. Thus, it is not a flexible field, but rather solid instead. What is compiled as data, will most surely be stored as such. Perhaps, through the stratification of information, concepts and knowledge may change eventually. However, this process will only stand as a posterior correction. The only alternative would be an erasure of old data, which however would be a destruction and rebuilding rather than a modification. This is to say that the digital world cannot be considered a fluid society, but instead constituted by solid and permanent data. No new or redacted data can be considered as an evolution of a previous code, or in any way referable to an old one. They will be treated as two completely separated entities.

In the digital world, the socio-economic value of information does not derive from explicit knowledge, which is object of dialogical logic and mathematical understanding, but it rather lies in the implicit information. Precisely its hidden nature allows for an increase in the information's value. The value resides on the difficulty to decipher the patterns of this submerged data. Whoever is able to grasp the key to read efficiently this enormous production of data, is able to open doors that were unimaginable before. This is the reason why data analysts are becoming a fundamental work figure, and why apparently free social media like Facebook or Instagram have income net-worth bigger than entire countries' GDPs. Van Djik (2018) states that:

"This transformation is called datification (Mayer-Schönberger & Cukier, 2013). It allows the tracing, quantifying, interpreting, and predicting of people's behavior, among them citizens and voters. This can be done by screening online behavior or by filling in a database with known personal characteristics combined with online

behavior. This is the fast-growing practice of digital and social media marketing in political or election campaigns." (Van Dijk and Hacker, 2018)

Moreover, these submerged data reflect an aspect of the *homo sapiens* that is recurring in the creation of the fields of interaction. Indeed, when we talked about the emergence of civilization, we have agreed that it was not a rational and informed choice. It was rather an outcome derived by human fears and emotions. The emotive field was fundamental also for the creation of the constituted imaginary orders. Of course, with the evolution of civilizations the social structure tended to be based on legal and rational principles of equality. However, emotions may still dictate the magnitude of adherence to certain political movements, or the passion humans are willing to dedicate to an ideal. One danger derived by the prominence of emotions over rationality on the internet is the emergence of fake news. Especially on social media, people can be persuaded or mobilized by questionable and inaccurate messages, mostly designed to trigger the "gut-feelings" of users. Indeed, to date, the only filters that block content from being posted are the law and specific norms. Facts or opinions may be untrue, but not illegal, thus "postable". In order to stop the tide of fake news, Facebook accepted to implement different measures, such as developing new software and algorithms, or instituting news agencies and universities to be fact-checkers.

However, the true impact of emotions in the digital world is derived from their creation of the subtle data that gives inherent value to social media platform. For the first time, the digital world is able to register all the choices taken by users to build data schemes that then design patterns of likeability and trends, understanding from this massive aggregation of information where these subconscious choices will eventually lead the entire society. In other words, just by studying this subtle data, which is generated by seemingly unrelated actions, a supplier is able to correctly forecast the future cultural and cognitive needs of the average user, thus guessing adequately their demand.

As aforementioned, every single operation individuals make in the digital sphere creates data. With this data, one can draw a portrait of them that becomes increasingly

vivid with the proportional increase of our digital operations. As said, data stratifies and carves a more detailed representation of us. Hence, the digital identity created is just a mixture of our emotional projections. Our personal identity, that has physical and mental connotations in the material world, is being coupled with this *hyperreal* digital construct that is completely detached from the former, but correlated and precise.

This detachment is not a banal or simple concept. Rethinking about the Cartesian statement *cogito ergo sum,* where identity is correlated to the ability to think, we may say that this new *hyper-real* identity does not follow such reasoning. The identification of one individual in the digital world is not created by the equivalence essence = thought, like in the material world, but rather thought $\to$ essence. In other words, the *hyperreal* essence is constituted by an agglomeration of data over time which builds it as small digital bricks. Thus, the thought and decision-making process are precedent and external to the identity. However, as the thought that generates the *hyperreal identity* corresponds to the essence present in the material world, one can say that these identities, though separated and distinguishable, are intrinsically interconnected.

Social vs Digital Interactions

The digital world is indeed created by data, information, and logical cognitions, but it is also the place for direct participation of the social subjects and communities, especially regarding the political forces. In fact, there is evidence of more interest and engagement of individuals in what happens around them. This may be due to the relative ease to access the digital system rather than the social. Van Dijk (2018) uses the term "efficacy" to express the belief that your voice is heard and produces meaningful changes in society. Although his definition is precisely refereed to the political system, it is shareable to all forms of social interaction. Paradoxically, individuals feel more engaged in the social world by indirectly addressing it from digital platforms. For instance, how many of our online friends or followers do we talk

to, online or in real life? However, it is not customary in the digital world to keep only interactive relationships like it is in the social world. Extensive social linkage is indeed a symbol of status also in the material world, but in the digital world this concept is enhanced. In particular, those online platforms standardized for social connectivity, like Facebook, Instagram, or Twitter, witnessed the emergence of a new figure: the influencer. As a figure, it is gaining more and more power within social perception, both in the digital and, for extension, social world. For example, influencers have become the primary promoters for the phenomenon of issuefication. This process is gradually but steadily mutating the political world. Initially, politicians had seen the potentialities of these platforms as a means to achieve greater communicative reach. Thus, they wanted to become influencers. Instead, influencers, who most of the time have nothing to do with the political system, both in competence and role, want to become politicians. For instance, at the beginning of April, in Italy, the political agenda had been dictated by content creators. The week (29th of March to 5th of April) started with Aurora Ramazzotti's denunciation on the phenomenon known as *Catcalling;* it proceeded with a discussion fostered by Fedez, Mahmood, and Elodie, on the DDL Zan against homo-transphobia; and it ended with Chiara Ferragni's invective concerning the vaccination management. Ignited by the influencers, these discussions impacted also the traditional media and, as said, the political agenda. In short, as the strong and extremely influential political parties started to lose ground over the last decades, the political world has seen the emergence of influencers as substitutes. For this reason, politics and celebrities will become increasingly intertwined over time. However, the traditional political parties, who were based on a strong identitarian ideology, addressed each single political affair as components of policy programs. Instead, influencers debate each single issue singularly and precisely. Hence, the term applied is issuefication. Debates will be raised with a steady detachment from traditional left-right ideologies or totalizing visions.

There are positive impacts of this process. It democratizes the political debate by increasing the reach and awareness on certain predicaments. However, the true danger

of social media, that in fact harnessed the current political world as a whole, is that it does tend to increase the reach, but sacrificing the complexity of the predicaments involved. In short, the political system has more volume but less depth. This is risky because it may cause even more polarization among individuals than before. This was the case of the last election in the USA, between Trump and Biden, but it has happened also between Trump and Clinton. The debate between Democrats and Republicans, even if it involved many more people than before, had a vastly more polarizing and tense dialogue. Van Djik (2018) addressed this precise *personal and emotional style* of expression, that instead of democratizing the debate, tends to suffocate it:

"Social media are interpersonal channels. This has the advantage of bringing politics to the people in everyday language and meaning because public or political communication reaches a private tenor everybody understands (Highfield, 2016). With this characteristic social media enhance the epochal trends of personalization of politics, the growing importance of imagery and personality for politicians, the rise of a politics of scandals and a type of democracy which has been called emotional, drama, or entertainment democracy. The disadvantage is, however, that the classical view or norm of political communication as a rational practice for either decision making or opinion making is weakened. In particular, the deliberation view of democracy based on rational debate in a free, equal, and reasoned public space becomes less realistic.

One of the results of this emotional and personal style on social media is that all kinds of emotions are driving the conversation, including scolding, jeering, and other abusive behavior. Participants rejecting these types of conversation will escape these discussion outlets." (Van Dijk and Hacker, 2018).

In conclusion, the entanglement that the online sphere has with the material world is now clear. Social media indeed have the power to shape the socio-political agenda and to highlight the issues that matter to individuals. However, the impact the digital world has as a permeating agent of the political world does not seem to be addressed properly. The nature of the digital media is considered inherently demeaning and often not taken

seriously. Once the contact between the social and digital world has been established, it is possible to assert the impact of the socio-political sphere and design a new framework that comprehends a coherent and complex identity that holds both the digital and social realities inside of it. In other words, a digital culture may emerge only once the digital identity, constituted by data and decision-patterns collection, properly interacts with the cognitive identity of the social world.

Drawing Some Conclusions

However, regardless of the dangers and benefits influencers may have brought to the table, how could they channel such an extensive network of political interest? As said, most of them do not have competences nor the legal authority to dictate agenda. How are they so "powerful" in the digital world, whilst sharing much less power in the social and material world?

Indeed, the correspondent of the influencer in the social world is the celebrity, or VIP. While they still enjoy vast privileges and a high rank in society, they do not enjoy the power they have on social media. The main difference lies, as usual at this point, on the structurization of the social imaginary order for the social world, and the standardization of the platform for the digital. Influencers emerged only on platforms based on social connectivity, like Facebook, Twitter, or Instagram. Because of the basic principle on which these specific platforms rely, which is indeed not the quantity of content shared, but the user's reach, those who have millions of followers consequently have a huge sphere of power within the platform. On the other hand, celebrities do not have such power in the material world as the constituted imaginary order is built to be ruled and governed by other kinds of people, which we have discussed in the second chapter. These social media platforms are built to consider these people as the principal actors, at the top of the digital pyramid. For instance, in platforms not based on social

connectivity but on content streaming, like Netflix or Spotify, there is no place for influencers. Roles and functions change accordingly to the platforms' models.

If we have previously built Cultural Darwinism with these elements, it is now possible to build a Network Darwinism with its correspondents of the digital world. As a matter of fact, we have found the environment, the individuals inhabiting it, and the structure of their interaction. As environments are different, so are social media platforms. The model of the platform changes according to its standard and purpose. Users react to each model and adapt where they are *fit*. For instance, only 5% of Snapchat US users have more or less 56 years old, according to demographics statistics on Onmicore (2021). Instead, the same study, related to twitter, affirmed that 36% of US users are older than 50. Therefore, older people, with different interests and demands, see Twitter as the community they better fit into. With regards to the disposition of users in the "digital pyramid", usually, who is at the top of one platform is not inevitably at the top of another one. Moreover, even if some individuals may have a bigger share of resources, or may heavily impact the overall ecosystem, every organism has its purpose and functionality within it. Those who are not fit to survive in certain digital platforms simply shift from one platform to another. The standards and models offered by the digital world are such that they can include all the different characteristics of individuals. However, it is not rare that some people completely dislike the hyper-reality generated in the digital world. In addition, people are often annoyed by the emotional basis of expression, that may usually bring to useless polarization or verbal harassment. In other words, some individuals may find themselves to be completely *unfit* to this arena of interaction, thus avoiding the digital world in toto. For instance, of the three worlds, the digital is the one with most possibilities of action for users, but the easiest one to escape.

In conclusion, the digital world is an incredibly interesting place of interaction. The individuals inhabiting it are able to communicate in forms that transcend national and geographical barriers, overcoming boundaries and fostering inclusion. Democracy and equality are once again appliable with difficulty to the system, but they have

possibilities that were unprecedented and simply impossible outside of this world. However, the identities interacting with one another may be considered only as a reflection of the people inhabiting the material world. They are built upon decisions, interactions, and preferences taken by our deep and emotive unconscious, thus often eluding the cognitive and rational barriers. Moreover, new figures are emerging as leaders of this world, that is gradually becoming more and more entrenched and intertwined with the material. Even if we may have designed how this new arena of interaction is structured in all of its elements, nobody is able to predict how these elements will evolve over time, and most importantly how they may affect the other arenas. That being said, the purpose should be to acknowledge its flaws and prevent potentially negative outcomes, that could endanger the social achievements that required thousands of years to obtain, like freedom of expression, fair and equal distribution of knowledge, and privacy. In addition, the digital world should correct the issues regarding the use of data, starting from its protection up to user awareness, in order to foster informed choice and rational behavior.

The digital world is not just a tool for amplifing media volume, but indeed an entirely new world for the *homo sapiens.* As such, it has its own rules, principles, habits, and behavior. Individuals must be educated on how to properly participate in such a system in order to promote positive exchange and dialogue. It is precisely by appreciating the difficulty in creating sustainable places of social interaction that one could then concretely foster ideals of participation and inclusiveness. It would be a shame to let an invention with such wonderful potential to be tarnished by human ignorance and inaptitude.

Conclusion

The genus *homo* appeared on Earth approximately 2,5 million years ago. This genus counts roughly twenty species, all extinct except for the *homo sapiens.* For all their existence, these species, except for some handicraft skills and a primal use of technology, have never proven to be special compared to other animals. In other words, to an external eye, those species were not different in any way and did not have any particularity compared to the rest of the animal kingdom. Indeed, they had to endure the rigid struggle for survival system and strictly follow the biological rules of adaptability and compliance to nature's demands. However, with the arrival of the *sapiens*, which is the last existing species of the genus *homo*, something changed.

For the first time in the biological history of the planet, a species emerged with a particular ability. These creatures, gifted with extraordinary imagination, were able to create and perceive concepts that were not real nor concrete. Indeed, the ability to communicate is common in the animal kingdom. However, no other species on the planet is able to communicate abstractions. It is precisely this skill that allowed *sapiens* to become "special". Over these abstractions, humans started to create systems of beliefs, social structures, and political arrangements which were, for the first time amongst animals, flexible and collectively accepted. Precisely these two characteristics were responsible for the creations of societies that could allow the cooperation of millions of individuals. These abstractions, when properly rooted in the individuals, create what are called constituted imaginary orders, that is, the structure of the social arena. With this process, the *homo sapiens* was able to build a super-structure, with the implementation of laws, politics, justice, economy, etc. Thanks to this massive cooperation, civilizations emerged. Humankind was finally able to evade the boundaries of the biological and natural arena, overcoming the struggle for survival and ensuring the endurance of the species.

In the natural arena, all the individuals of the *homo sapiens*, regardless of subtle psycho-physical differences, are conventionally considered biologically equal from

one member to another. Generally, each individual relatively shares the same organoleptic needs with every other human being. There is no racial differentiation in the scientific community. Of course, different bodies or mentalities need different number of resources. A greedy or glutton individual may crave more food than a average person. Nevertheless, in the biological world, there is a conventional threshold of necessities needed for survival, and a maximum amount to satisfy said necessities. This is to say that no human will ever need a humongous amount of food to survive while someone else may survive with few calories a day. Generally speaking, the demand is equal.

True inequalities arise in the social arena. In this field, concentric and internal to the natural one, the true differences start to arise among individuals. Indeed, the constituted imaginary order defines the needs of the host society, and how resources are allocated and distributed, which is usually very inhomogeneous. Each constituted imaginary order has its requirements and desires, which consequently create new habits and needs in the individuals inhabiting it. Even if social structures may look like islands in the sea, clearly distinguished from one another, they actually interact and merge quite frequently, and consequently change accordingly. As a matter of fact, if one must consider how *homo sapiens* change over time, the rate of variation in the natural arena is virtually inexistent when compared to the social one. Millennia are required to see evidence of biological change in people, while social structure may vary even more than once in just an average lifetime. Thus, it was described how instead of a Social Darwinism, where some cultures are meant to predominate over others, a more appropriate form of cultural flexibility must be found. If nature sees the organisms mutating in order to be fitter to changing environments, humans too must be able to adapt to the everchanging social structures. Relentlessly grasping a social constituted order is neither wise nor healthy for the social individual. Being flexible and open to change, leaving cultures to naturally adjust and adapt to new paradigms, is both cautious and accurate according to the model Darwin had described for the natural world.

Lastly, with the arrival of the digital world, new characters and identities have surfaced. This hyper-reality is external to the material world and functions with different principles and needs, transcending natural, political, and cultural borders. This calls for an even higher degree of flexibility, as it is difficult to establish a closed framework in such an open form of interaction. However, this new mysterious arena of interaction is still obscure to most. Its functioning affects the way we interact with one another, sometimes damaging free exchange of contents and cultures. In addition, the emotive nature of the identity creation allows for irrational behavior that may harm cooperation. The research has explored how Darwinism could be applied to the digital world. Indeed, the nature and structure of the ecosystems were presented, as well as the individuals that live in it, and the way they interact.

Indeed, through this research, a more thorough perception of the *homo sapiens* has emerged. We have seen its behavior in all its fields of both objective and intersubjective interaction. Through the theories developed, it was possible to understand and interpret different predicaments and events happened throughout history, like the stopped human biological evolution, the rise of civilization, the creation of constituted imaginary orders, inequalities and hierarchies, and the advent of social media. Darwinism has always been a very controversial and debated theory, which deeply affected the texture of human perception of reality. This research attempted to adequately analyze the Darwinist interpretation of all the arenas of interaction *homo sapiens* have encountered. Indeed, humankind has the power to singlehandedly change certain aspects of reality. Even if we have proven that biological evolution has virtually stopped, we can only dream of where social and digital evolution may bring us.

Bibliography

Darwin, C. R. 'Recollections of the development of my mind & character' [Autobiography [1876-4.1882] CUL-DAR26.1-121 Transcribed by Kees Rookmaaker. (Darwin Online, http://darwin-online.org.uk/) page: 78 O

Pievani, T. (2013) *Anatomia Di Una Rivoluzione: La Logica Della Scoperta Scientifica Di Darwin*. Sesto San Giovanni: Mimesis Edizioni.

Darwin, C. R. (1859). *On the origin of species by means of natural selection, or the preservation of favoured races in the struggle for life*. [1st edition] London: John Murray.

Survival (2019) The Sentinelese [Online]. Available on : https://www.survivalinternational.org/tribes/sentinelese [Accessed: 26 May 2021]

Britannica The Editors of Encyclopaedia (2020) Ecosystem [Online]. Available on: https://www.britannica.com/science/ecosystem [Accessed: 26 May 2021]

National Human Genome Research Institute (2020) The Human Genome Project [Online]. Available on: https://www.genome.gov/human-genome-project. [Accessed : 26 May 2021]

Harari, Y.N. (2011) *Sapiens: Da animali a dèi. Breve storia dell'umanità*. Bompiani, 2017

Wolff, J. and David, L. (2021) "Karl Marx", *The Stanford Encyclopedia of Philosophy.* [Online] Edward N. Zalta. Available from : https://plato.stanford.edu/archives/spr2021/entries/marx/ [Accessed: 26th May 2021]

Jeynes, W. H. (2011) *Race, Racism, and Darwinism*, Education and Urban Society, 43(5), pp. 535–559. doi: 10.1177/0013124510380723

de Waal, F. (1982) *Chimpanzee Politics: Power and Sex Among Apes.* (25th Anniversary ed.). Baltimore, MD

Letzter, R. (2016) There's no such thing as an alpha male. *Business Insider* [Online] Available from: https://www.businessinsider.com/no-such-thing-alpha-male-2016-10?IR=T [Accessed: 26th May 2021]

Schwartz, N.D.(2016) Economists Take Aim at Wealth Inequality. *New York Times.* [Online] Available from: https://www.nytimes.com/2016/01/04/business/economy/economists-take-aim-at-wealth-inequality.html?searchResultPosition=1 [Accessed: 26th May 2021]

Leoncini, R. (2016) Inequality is good for society. Do you agree. *Debating Europe* [Online] Available from: https://www.debatingeurope.eu/2016/10/03/inequality-good-society-agree/#.YJVpSbUzbIU [Accessed: 26th May 2021]

Liang Qichao (1900) "Xianjin shijie dashi lun" [On Major trends in the Contemporary World], in Yinbingshi heji ji wai wen, vol. 2, ed. Xia Xiaohong. Beijing: Peking University Press, 2005, 1253.

Keynes, R. D. (2001) *Charles Darwin's Beagle diary*. Cambridge: Cambridge University Press.

Spencer, H. (1872) Mr. Martineau on Evolution*, Popular Science Monthly, Volume 1 July 1872*

Spencer, H. (1851) *Social Statistics*. London: Chapman

Darwin, C. R. (1871) *The descent of man, and selection in relation to sex*. Volume 1. 1st edition. London: John Murray

Bannister, R. (2010). *Social Darwinism: Science and Myth in Anglo-American Social Thought*. [ebook] Temple University Press. Available at: https://www.perlego.com/book/2039696/

Agbor, S.A. (2015) Globalization and Multiculturalism: Defining the New Universalism in Selected Texts of Samuel Selvon, V. S. Naipaul and Anita Desai. *Athens Journal of Philology* - Volume 2, Issue 3 – Pages 171-184 (doi=10.30958/ajp.2-3-3)

Pasolini, P.P. (1976) *Lettere* Luterane. Translated from Italian by Hood, S.New York: Carcanet Press (1987)

Van Dijk, J.A.G.M. and Hacker, K.L. (2018). *Internet and Democracy in the Network Society*. [ebook] Taylor and Francis. Available at: https://www.perlego.com/book/1554510/

Punathambekar, A. and Mohan, S. (2019) *Global Digital Cultures: Perspectives from South Asia*. USA: University of Michigan Press

Dorsey, J. (2021) [Twitter] 14th January 2021. Available at: https://twitter.com/jack/status/1349510769268850690 (Accessed: 27th May 2021).

[1] Dorsey, J. (2021) [Twitter] 14th January 2021. Available at https://twitter.com/jack/status/1349510770992640001 (Accessed: 27th May 2021).

Maurizio Ferraris- Filosofia del Digitale: Il Mondo e le Sue Transformazioni (23th October 2020) YouTube video, added by mimesisedizioni [Online]. Available at https://youtu.be/xAxH2VHL4_s [Accessed: 27th May 2021]

Omnicore (2021) Snapchat by the Numbers: Stats, Demographics & Fun Facts [Online] Available From: https://www.omnicoreagency.com/snapchat-statistics/ [Accessed: 27th May 2021]

Abstract

"C'è qualcosa di grandioso in questa concezione per cui la vita, con le sue diverse forze, è stata originariamente infusa in poche forme o in una sola; e da un inizio così semplice, innumerevoli forme bellissime e meravigliose si sono evolute, e tuttora si evolvono." Così Darwin concluse nel 1859 il suo personale capolavoro che lo consacrò nella storia non solo della biologia, ma di tutte le scienze: L'Origine della Specie. L'ambizione dell'opera era tanto grande quanto il successo ricevuto. Charles Darwin, infatti, riuscì così a risolvere "il mistero dei misteri". Com'è nata la vita sulla Terra? Come hanno fatto a sorgere esseri senzienti così sofisticatamente complessi e diversificati? Prima di Darwin, la risposta a queste domande risiedeva nella fede in un Dio pantocratore o a teorie scientifiche di dubbia rilevanza empirica. In entrambi i casi, vi era la convenzione universale che le specie fossero sorte esattamente come sono ora, in una condizione anche definita di fissità. Era impensabile un ambiente abitato da specie diverse da quelle presenti. È infatti interessante pensare che molte leggende dell'antichità riguardanti ciclopi, giganti, draghi, o altre creature mitologiche, fossero nate in seguito al rinvenimento di ossa di dinosauri, incompatibili a qualsiasi altra specie animale a loro contemporanea. Dunque, l'idea era di specie perfette in quanto tali. Il Darwnismo invece ha apportato alla scienza un cambiamento radicale. Non solo non siamo specie fisse, ma nemmeno perfette. Molte sono state le mutazioni richieste per raggiungere la complessità biologica di cui godiamo ora. E certamente, moltissime, se non la maggioranza, di queste mutazioni sono state sfavorevoli o disagevoli. Il progresso evoluzionistico non è altro che una serie di infiniti tentativi e di sbagli. Ma appunto, vi è qualcosa di grandioso in tutto questo. Un inizio semplice che ci ha condotto alle meraviglie dell'evoluzione, dovute alla resilienza perpetua della natura, che di fronte all'errore, ha imparato ad adattarsi e a cambiare.

Nell'elaborato da me presentato, a completamento del ciclo di studi di *Politics, Philosophy, and Economics,* ho voluto ripercorrere i passaggi evolutivi dell'essere umano e delle sue vicende all'interno del ciclo storico della Terra. Il sistema che ho voluto implementare per analizzare propriamente questo rapporto è appunto il Darwinismo applicato all'*homo sapiens* nei suoi personali campi di interazione che abita come organismo complesso: l'ecosistema naturale, l'arena sociale, e il recentissimo mondo digitale. La Teoria di Darwin, infatti, richiede come elementi necessari un ecosistema, gli organismi, e un certo grado di interazione tra questi. Ho reputato interessante prendere in analisi come l'*homo sapiens* abbia interagito in questi tre diversi macro-ecosistemi e come si sia evoluto in essi.

Come primo passo, ed oggetto infatti del primo capitolo, vi è una rielaborazione e un tentativo di ripercorrere l'essenza della teoria, con tutte le sue condizioni e causalità. La teoria dell'antenato comune e della selezione naturale darwiniana, infatti, per

quanto possano apparire ormai fissate nelle menti di chiunque, o addirittura scontate, sono fondamentali acciocché il lettore possa avere delle basi solide sulle quali costruire la dissertazione successiva. In breve, la principale condizione da mettere in chiaro è che la selezione naturale non significa "evoluzione per uso e disuso". Ovvero, le specie non sono divenute gradualmente più complesse perché hanno attivamente sviluppato alcuni organi in risposta alle necessità dell'ambiente circostante. Le specie non hanno percepito i loro bisogni e sforzato il loro organismo affinché fosse il più adatto possibile al proprio ambiente. Questa teoria si avvicina di più all'evoluzionismo Lamarckiano, che portava come campione la giraffa, immaginata originariamente con il collo corto, che si è "allungata" nello sforzo per raggiungere i rami più alti, fino ad arrivare all'altezza che conosciamo oggi. Secondo Lamarck vi è negli esseri viventi una tendenza innata a evolvere verso una complessità maggiore. I cambiamenti raggiunti durante la vita di un organismo venivano quindi trasmessi alle generazioni successive.

Il leggendario viaggio sulla Beagle compiuto da Darwin a metà del diciannovesimo secolo soppiantò definitivamente la tesi di Lamarck con un'intuizione geniale. Non è tanto l'organismo a decidere di mutare per soddisfare le condizioni ambientali, ma è l'ambiente a stabilire i caratteri per la sopravvivenza e a selezionare, per l'appunto, chi è più adatto e chi invece inevitabilmente sopperirà. In questa lotta per la sopravvivenza gli individui dotati di caratteristiche favorevoli sono avvantaggiati rispetto a quelli che ne sono privi. Queste caratteristiche permettono alle specie avvantaggiate di sopravvivere e di riprodursi. Gli svantaggiati devono sperare in una mutazione, assolutamente casuale, che possa permettergli di scamparla. L'alternativa, nel freddo meccanismo naturale, è l'estinzione. Una specie, dunque, sopravvive quando i caratteri adatti alla sopravvivenza si trasmettono da una generazione all'altra. Questi caratteri mutanti alla fine determinano la trasformazione totale della specie. La selezione naturale infatti elimina gli organismi che ne sono sprovvisti, e crea una nuova specie invece con coloro che hanno acquisito questi caratteri più adatti all'ambiente.

Questo processo però nasconde un'eventualità che sfugge ai più, ma che Darwin rende invece chiara. L'evoluzione, per quanto sia un meccanismo universale e intrinseco in natura, non è assolutamente necessaria. Alcuni organismi, a un certo punto della loro storia, sono entrati talmente in sintonia con il loro ambiente che nessun altro tipo di mutazione è stata necessaria. È il caso, per esempio, dell'ornitorinco, che vivendo in una sua nicchia ecologica, non ha più avuto bisogno di evolversi per sopravvivere. La stessa condizione ha coinvolto due specie antichissime di predatori che occupano tuttora posizioni elevate nella catena alimentare: il coccodrillo e lo squalo da collare. Ma a prescindere dell'interesse biologico che tutte queste nozioni possono generare, è funzionale a capire che è effettivamente possibile evadere dalla lotta per la sopravvivenza Darwiniana. Un'altra specie, a noi ben nota, è riuscita in questa stessa impresa: l'*homo sapiens*.

Il genere *homo* apparve sulla Terra circa 2,5 milioni di anni fa. Questo genere conta circa venti specie, tutte estinte tranne per l'*homo sapiens*. Per tutta la loro esistenza, queste specie, ad eccezione di alcune abilità artigianali e di un uso primordiale della tecnologia, non hanno mai dimostrato di essere speciali rispetto ad altri animali. In altre parole, ad un occhio esterno, queste specie non erano in alcun modo diverse o assolutamente particolari rispetto ad altri primati. La loro presenza aveva un impatto indifferente sul mondo, quasi minimo, ed una posizione relativamente bassa nella catena alimentare. Anche loro erano coinvolti nella rigida lotta per la sopravvivenza e adattarsi alle regole biologiche e naturali. Tuttavia, con l'arrivo dei *sapiens* qualcosa è cambiato.

Per la prima volta nella storia biologica del pianeta, una specie emerse con una particolare abilità comunicativa. Molte specie sono in grado di comunicare tra loro, in maniera più o meno efficace o articolata. Tuttavia, i *sapiens*, dotati di una straordinaria immaginazione, erano in grado di produrre qualcosa di totalmente inedito. Nessun'altra specie sul pianeta è infatti capace di comunicare astrazioni, di creare e percepire concetti che non sono né reali né concreti. È proprio questa abilità che ha permesso ai sapiens di diventare "speciali". Grazie a queste astrazioni, gli esseri umani hanno iniziato a creare sistemi di credenze, strutture sociali e accordi politici ambivalentemente flessibili e collettivamente accettati. Inconcepibile per qualsiasi altro animale. Proprio queste due caratteristiche, le flessibilità e la condivisione massiccia, sono state responsabili per le creazioni di società che hanno consentito a milioni di individui di cooperare.

Queste astrazioni, quando correttamente radicate negli individui, creano ciò che vengono definiti come ordini immaginari costituiti (Harari, 2011), cioè la vera e propria struttura dell'arena sociale. Questa struttura è l'ecosistema dove interagisce l'individuo *sapiens* sociale. Con questo processo, l'homo sapiens è stato in grado di costruire una super-struttura di leggi, politica, giustizia, economia, ecc. Grazie a questa cooperazione di massa, la civiltà emerse. L'umanità fu finalmente in grado di eludere i confini dell'arena biologica e naturale, superando la lotta per la sopravvivenza e garantendo l'esistenza della specie. Abbiamo abbandonato il Darwinismo Naturale alla volta di nuovo ambiente, artificiale e intrinseco nell'uomo: il mondo sociale.

Nell'arena naturale, tutti gli *homo sapiens*, indipendentemente dalle sottili differenze psico-fisiche, sono convenzionalmente considerati biologicamente uguali da un membro all'altro. In generale, ogni individuo condivide relativamente le stesse esigenze organolettiche con ogni altro essere umano. Non ci è differenziazione razziale nella Comunità scientifica. Naturalmente, le differenti fisiologie o mentalità creano bisogni diversi di risorse. Un individuo avido o goloso può desiderare più cibo di una persona media. Tuttavia, nel mondo biologico, vi è una soglia convenzionale di necessità sufficienti per la sopravvivenza, e una quantità massima per soddisfare tali

necessità. Ciò significa che nessun essere umano avrà mai bisogno di una quantità enorme di cibo per sopravvivere, come nessuno può sopravvivere con poche calorie al giorno.

Le vere disuguaglianze sorgono nell'arena sociale. È proprio in questo campo, concentrico e sottoinsieme di quello naturale, che le vere differenze cominciano a sorgere tra gli individui. Infatti, è l'ordine sociale a definire come le risorse vengono assegnate e distribuite. Solitamente, questa spartizione è molto disomogenea. L'ordine immaginario costituito, l'ecosistema del mondo sociale, stabilisce coloro che sono avvantaggiati e svantaggiati, chi governa e chi è suddito, chi è in cima alla catena alimentare e chi soccombe. Infatti, ogni ordine sociale crea le sue esigenze e desideri. Questi a loro volta creano abitudini e bisogni negli individui.

Siamo abituati a pensare che le strutture sociali siano ecosistemi solidi, stabili, e duraturi nel tempo. Al contrario, questi ordini interagiscono e si mescolano abbastanza frequentemente, evolvendosi di conseguenza e in maniera estremamente continua e repentina. Infatti, quando si considera l'evoluzione dell'*homo sapiens* nel tempo, il tasso di variazione nell'arena naturale è praticamente inesistente rispetto a quello sociale. Millenni sono necessari per vedere la prova di cambiamento biologico nelle persone, mentre la struttura sociale può variare anche più di una volta nella vita media.

Questo processo è l'argomento protagonista del secondo capitolo. Vengono analizzati dunque l'ecosistema, ovvero il mondo sociale definito come ordine immaginario costituito, l'organismo che lo abita, ovvero l'individuo sociale, e i modelli di interazione, ovvero le astrazioni utilizzate come processo comunicativo per far raccordare gli individui. Nella seconda metà del secondo capitolo viene anche discusso il Darwinismo Sociale di Spencer e proposto un nuovo modello di Darwinismo Culturale che possa ovviare alla creazione di disuguaglianze identitarie e culturali. Nel Darwinismo Sociale è previsto che alcune culture predominino sopra le altre poiché più "forti". Questa applicazione nasce ovviamente da una visione, forse distorta, del meccanismo della lotta alla sopravvivenza. È necessaria invece una forma più appropriata di flessibilità culturale, poiché non vi è alcuna legittimità concettuale nell'asserire che una cultura sia migliore di un'altra, né nessuna rilevanza con il modello Darwinistico.

Come la natura vede gli organismi mutare per adattarsi ai mutevoli ambienti, allo stesso modo, i *sapiens* devono essere in grado di cambiare le proprie strutture sociali, anch'esse in continua evoluzione. Affermare un ordine sociale costituito come predominante e unico non è salutare per l'individuo, che si ritroverebbe disadatto alle nuove condizioni, e per l'ambiente sociale, che perderebbe la propria diversificazione e resilienza. Essere flessibili e aperti al cambiamento, lasciando che le culture si adattino naturalmente ai nuovi paradigmi, significa essere allora coerenti con il modello Darwinistico per il mondo naturale.

Infine, il terzo capitolo affronta l'arrivo del mondo digitale, dove emergono nuovi personaggi e identità. Questa iper-realtà è esterna al mondo materiale e ha diversi principi e bisogni, che trascendono i confini naturali, politici e culturali. Ciò richiede un grado di flessibilità ancora più elevato, in quanto è difficile affermare una visione unica in una forma di interazione così pluralistica. Tuttavia, questa nuova misteriosa arena di interazione è ancora difficilmente intelligibile. Il suo funzionamento influisce sul modo in cui interagiamo in questo ambiente, spesso danneggiando il libero scambio di contenuti e culture. Inoltre, la natura emotiva della creazione dell'identità digitale porta ad un comportamento irrazionale spesso nocivo.

Anche in questo caso, si è esplorata l'applicazione del Darwinismo nell'arena virtuale. Anche qui, sono state presentate la natura e la struttura degli ecosistemi, gli individui che la abitano e l'interazione tra gli stessi.

In conclusione, nella tesi è emersa una percezione più approfondita dell'*homo sapiens*. È stato osservato il suo comportamento in tutti i suoi campi di interazione oggettivi ed intersoggettivi. Attraverso le teorie sviluppate, è stato possibile interpretare diversi eventi accaduti nel corso della storia, come l'arrestata evoluzione biologica umana, l'ascesa della civiltà, la creazione di ordini immaginari costituiti, delle disuguaglianze e gerarchie, e l'avvento dei social media.

Il Darwinismo è sempre stata una teoria molto controversa e dibattuta, che ha profondamente influenzato la percezione umana della realtà. Questa ricerca ha tentato di analizzare adeguatamente l'interpretazione Darwinista di tutte le arene di interazione degli *homo sapiens*, e soprattutto condividere la consapevolezza che l'umanità ha il potere di cambiare da sola alcuni aspetti della realtà. Ciononostante, anche se abbiamo dimostrato che l'evoluzione biologica si è praticamente fermata, possiamo solo sognare dove l'evoluzione sociale e digitale può portarci.