3. From Artificial Intelligence to Natural Intelligence

No machine, nor any non-human animal, produces value. Value is a primary production, wherein humans ascertain what is deemed valuable. Humans not only serve as the origin but also the ultimate purpose. For this reason, **I propose replacing the syntagm "human capital" with "human heritage" to emphasize that humans are not merely the replaceable instruments of production and distribution, but rather the ultimate aim and meaning of all that transpires in the world**. This is not an affirmation of aentrism: the planet does not need us to save it, and life will continue to flourish after the last human disappears. But after that disappearance, it will no longer make sense or be of interest to discuss those minuscule matters regarding the universe that are so important to us: truth, falsehood, value, love, history, hope—essentially, the distinctive human heritage. If there are goods and services, it is only because there are humans; if they possess value, it is because the world is populated not only by viruses, beavers, and processors, but also by organisms that, unlike viruses, beavers, and processors, satisfy their needs through a cooperative system we refer to as 'economy' and 'society.'

3.1 What Is Life?

Let us approach the issue in a manner that avoids treating life as a metaphysical and tautological entity, viz., as a driving force or a vital impulse, as it was the case in the philosophies of life between the nine-

teenth and twentieth centuries. Instead, we can observe that the soul, the vessel of organic life, encounters an absolute and insurmountable boundary known as "death." This boundary is absent in inorganic life as well as in the non-living matter that is the predominant component of the universe. It is also absent in the ubiquitous mechanisms within the human form of life, which, as mentioned, systematically intertwines organic and mechanical life. Mechanisms merely imitate the distinctive properties of organic life in a sequential manner but are devoid of genuine development and, most importantly, of a definitive end or cessation. There is a unique quality in life that prevails over mechanisms, however often we are wrongly inclined to consider ourselves as slaves to machines. The crux of the matter lies in the fact that **will, or that which confers meaning on moral action and makes it possible, finds its foundation precisely in our organic basis as non-human animals and in its connection not with the realm of ends but with the mechanical supplements that define us as human animals.** The value of life has never been as apparent as it is on the Web, especially at the tumultuous boundary between the anthroposphere and the docusphere. In fact, to ask it with Schrödinger, what is life? The shadow of a fleeting dream or the struggle of metabolism against entropy? It is both: an essential principle, the living as opposed to the dead, the ζωή, and that which is experienced subjectively as a direct experience, the life we live, existence, the βίος.

In both cases and as previously mentioned, **the distinction between automaton and soul lies in the irreversibility of metabolism, a characteristic of the soul. It is an absolute on/off that differs radically from the serial on/off pattern proper to mechanisms**. Here is the point: What makes an organism have intentions while a mechanism merely receives them? Trivially, the fact that when a mechanism stops working, it can be repaired, whereas when an organism comes to a halt, it does so permanently. This fundamental distinction accounts for the fact that organisms, unlike mechanisms, have urges, volitions, and emotions. Imagining a bored or scared computer is impossible not only because the computer does not know it is bored or afraid (sometimes it happens to us too) but because if it knew, it would also know that these feelings are

unfounded: a computer has all the time in the world and all it needs is an update. This difference between on and off (organism) and the series of on/off, on/off, on/off (mechanism) applies to all animals, human and non-human alike.

Obviously, we are free to entertain the idea that our emotional frailties are not exclusive to humans and that automata (such as the replicants in *Blade Runner*) or superhuman beings akin to Greek gods could exist,[1] identical to us in every aspect. Such speculations are not illicit, as long as we acknowledge that they belong to the realm of fiction or myth. Yet, this is precisely why our forms of life have suddenly assumed such importance—they are unique. In *Existentialism Is a Humanism,* Sartre wrote that "we are on a plane where there are only men," leaving one to ponder which plane exactly he was referring to. Less than fifty years later, the clarification arrived: the plane is the Web, the great repository of human forms of life. **The anthroposphere, as the world of human life, that is, of the organism systematically connected to the mechanism, is therefore the foundation of the docusphere, which would not exist without humans and their forms of life.** On the level of the anthroposphere, we witness a twofold movement: on the one hand, the Web (in line with technology's basic tendency) is increasingly gravitating towards the organism, toward life as a genetic phenomenon of technology that holds significance only for a living being; on the other hand, that living being, which from its very inception has been intricately linked to technology and which precisely for this reason qualifies as "human," is increasingly gravitating towards the mechanism.

Let us recall what has just been said. Humans, like all organisms, have an internal purpose—metabolism as a struggle against death—resulting in only two states, on or off. When off, it remains so permanently. Unlike automata, which exhibit an evident external teleology (viz., they are means to an end), organisms are ends in themselves. The simple automaton, the tool, may break, but it can always be repaired or replaced. Complex automata are programmed for the longest possible series of

1 Martha C. Nussbaum, *The Fragility of Goodness: Luck and Ethics in Greek Tragedy and Philosophy* (Cambridge and New York: Cambridge University Press, 1986).

on/off cycles (traffic lights, internal combustion engines, computers) and the more intricate the process, the more the automaton reveals itself appropriate to its etymology (*automaton*, moving by itself). Nonetheless, this ideal tendency remains unrealized, for a complete movement necessitates an internal purpose while the automaton's purpose is externally motivated, for instance, by the soul that sets the home thermostat.

This circumstance constitutes the foundation of the superiority of humans over machines from an axiological standpoint, as **it is humans who confer value and meaning upon machines and tools. Alarm clocks and frying pans have explicit and unequivocal purposes: they are *made to* respond to the needs of organisms; humans—as mere organisms—are *made for* nothing more than sustaining themselves and deferring death**. But it is precisely through the encounter with mechanisms and the social world that those organisms assume their humanity. At this juncture, they discover that they are not solely *made to* live like brutes (merely following their internal purpose) but are also *made to* pursue an external purpose, the ideal of perfection. Such purpose was not part of their organic constitution but emerged from interactions with fellow humans and the highly sophisticated technologies of language, writing, and culture. In the human world, organisms interweave with the system of mechanisms and with that great machine that is society. Unlike non-human animals and just like a technical apparatus, external transcendent purposes are generated in the human animal through education.

3.2 The Techno-Anthropological Circle

This fundamental nexus constitutive of the human forms a **techno-anthropological circle: humans attribute external purposes to mechanisms (including the overarching mechanism of society), which in turn have a feedback effect on human organisms and shape the specific nature of humans, namely the second nature that we acquire through technology and culture.** This circle embodies both capitalization and value creation. The ongoing revolution is the greatest manifestation of

this transformative cycle (the greatest known thus far), and it should not be underestimated, as neglecting its significance would leave us ill-equipped to address any resulting crises. For indeed, throughout history, humanity has always distinguished itself from mere animality by embracing technological apparatuses. These supplements that remedy our organic deficiencies are also forms of appropriation and capitalization. The time invested in producing a technical apparatus, regardless of its complexity, is time saved and repaid through the performance of the technical apparatus. Therefore, technology and capital are synonymous and should be comprehended as such. Those who, even with the best intentions, advocate for a return to a world devoid of technology and capital, offer us an ambiguous gift: a brief, miserable, brutal, monotonous life that, to make matters worse, is profoundly inauthentic.

To become human means to develop increasingly sophisticated technologies. If we have accurately gauged the historical trajectory we have followed so far, it becomes indisputable that we are becoming more human with each passing day. From the outset, human nature has been a second nature—the result of the interplay between organisms and mechanisms, soul and automaton. The development of the automaton is the revelation of the soul, of what we are, both in the extensive history that lies behind us and hopefully promising future that lies ahead. This process of capitalization is boundless and should remain so unless we choose to sign the date and time of humanity's demise. I refer to the whole of humanity and the progress that defines it as such, and not to individual humans, who, unfortunately, are only slightly less ephemeral than fruit flies, and whose passage on the world stage is always that of an extra. **Those who speak of the "limits of development"[2] often fail to consider that these are intrinsically tied to the brevity of life itself. It is futile and presumptuous to ask humanity to impose limits on itself when these limits are already insurmountably imposed by its organic nature.**

2 Donella H. Meadows, Dennis L. Meadows, Jørgen Randers, and William W. Behrens III, *The Limits to Growth* (New York: Universe Books, 1972).

The opposite of degrowth is capitalization. **The great misunderstanding about capital is that it exclusively refers to industrial or financial capital (with the latter as the degeneration of the former) when, in fact, "capital" is the umbrella term for any form of accumulation of skills. Therefore, civilization as a whole must be viewed as a process of capitalization. The choice we have is not between capital and the absence of capital, but between just and unjust forms of capitalization.** It is important to emphasize that "capital" does not necessarily mean greed but is a process of accumulation of knowledge, know-how, and power. In other words, it is what we call "civilization." To form capital is to defer the present use of goods or resources with a view to greater benefits in the future. Learning a new technique, accumulating assets, and achieving personal merit are all forms of capitalization.

Capitalization, as the product of a historical and social structure, is humanity's fundamental resource that underpins the very foundation of ethics. For moral values, just like monetary ones, exist only within a system. Hence, there is no one single "capital," let alone *the* capital, but a multitude of capitals engaged in relentless competitions with some surpassing others in significance and benefit. Capital's true value lies in its ability to leverage the resources of hysteresis—to save, accumulate, and, most importantly, reinvest. For **this is the great secret of capitalization: Once an event is recorded, it becomes an object that can be iterated, allowing for a conservation of energy and an increase in possibilities. The effects of this process are much more evident in cultural and general human spheres than in the financial domain.** Furthermore, capitalization does not involve privatizing and sequestering something from the public domain, quite the contrary: it involves sharing and diffusion. This is manifest not in financial capital but in the vast common capital formed by technology, culture, and language. It is the cumulative result of these acts of recording and iteration that has shaped humans into what they are today.

3.3 Natural Intelligence and Artificial Intelligence

Intelligence, whether natural or artificial, is the ripest fruit of capitalization. Natural intelligence resides within a body while artificial intelligence within a machine, or, more precisely, is the machine itself. This makes all the difference: organisms, whether human or animal, have needs, desires, fears, enabling them to strive for power. It is therefore not surprising that there are hierarchies of dominance and subordination within packs of jackals or department councils, whereas it would be difficult to conceive of a cell phone giving orders to a thermostat without human interference. Let us dispel the specters. A stick, as a simple machine, offers great versatility in its potential uses (lever, club, javelin) and the variety of users (human, monkey, beaver). A plow is already much more reliant on a human user but, in return, during the act of plowing, it enables the human to become an integral part of the technological complex on equal footing with the plow and, if fortunate, with the ox. The same can be said of an assembly line. In contrast, the quintessential machine of the twentieth century, the automobile, depends on humans only for directions. More importantly, the smartphone, the quintessential machine of the twenty-first century, is entirely dependent on how we use it and holds no meaning outside of that use. Finally, the essence of the universal machine, the absolute machine, namely artificial intelligence, is the pure recording and processing of human life forms. AI feeds exclusively on human blood but, unlike vampires, it has no urgency, no need, and no drive to do so: The Web will never come looking for us unless we look for it, unless we turn on the machine.

In light of what has been said so far, we must debunk the myth that automation turns us into automatons. In fact, when the available technologies are not advanced enough, it is even necessary to resort to a form of mechanization of the human. For instance, eighteenth-century treatises on the art of war outline systems aimed at transforming soldiers into components of a great mechanism capable of carrying out a series of maneuvers with precision. The same applies to Fordism, which intensifies the human-machine relationship albeit with the notable differ-

ence that it simplifies the human tasks and consequently makes them more tedious and alienating. So far, the evolution of technology has always required the automation of the human. However, **as technology becomes capable of replacing humans in functions beyond mere physical strength and precision, it is imperative to ensure that humans become more human.** Humans are of particular interest precisely because of their humanity, because machines do not know how humans behave but are sophisticated enough to record these behaviors and learn from them.

What we call "humanity" arises from the encounter between an internal purpose (that of an organism) and technological products endowed with external purposes, which, in the case of human animals, become defining factors of their essence. A gorilla without a stick is still a gorilla, and the first human, when wielding a digging stick, was still an anthropomorphic ape. Our ancestors probably oscillated for millennia between occasional and systematic uses of technical devices. However, humans only emerged when systematic use prevailed. The sophistication of technological apparatuses, extending beyond mere tools to include symbolic structures like language and social objects from basic kinship relationships to quantum physics, led humanity to become the defining feature of those natural objects, namely humans, who, through technology, become social objects. It is within this context, as a consequence of an emergent process unfolding as a continuation of natural evolution, that humans became subjects, viz., that human organisms transitioned from being merely manipulable objects to being classifiable and knowable by other objects.

In other words, in the age-old debate between Anaxagoras (who claimed that humans are the most intelligent animals because they have hands) and Aristotle (who argued that humans have hands precisely because of their superior intelligence), I unequivocally side with the former. The "cognitive revolution" that supposedly occurred around seventy thousand years ago depended on our increasing systematic use of technology. It did not happen the other way around, with our cognitive abilities improving and subsequently leading to a more systematic use of technology. Cognition, like any natural element, evolves gradually,

whereas technology progresses rapidly within the cultural revolution because it capitalizes on the past. When a system of technological apparatuses reaches a critical mass, it becomes the catalyst for the cognitive revolution.

3.4 Culture as Second Nature

Behold, the techno-anthropological circle: on one hand, what we are stems from technology; on the other hand, the will to live of automata finds new life and new horizons precisely through humans. For it is the technical supplements that, by determining our form of life, will determine the specifics of natural human intelligence, setting it apart from other organisms. We do not *learn* how to live but *get used to living* thanks to our second nature that retroactively impacts the first. The transition from nature to second nature, from lived life to examined life, not only characterizes the human animal but is also the quintessence of that exclusively human process known as education. In fact, the teachings a cat imparts to its kittens or the flight lessons a magpie provides are not education but training because they reach an upper threshold very quickly and do not possess the infinite developmental nature intrinsic to the education of our species.

Consider the difference between reading a novel or a historical treatise and reading instructions for a water heater. Once we have absorbed the instructions, there is nothing more to be done except apply what we have learned, placing us in a similar position to cats or magpies. However, we have something that appears exclusively human. The act of reading a treatise or a novel extends beyond a singular application and beckons the exploration of additional treatises and novels. This process, often labeled as 'infinite,' is more accurately described as indefinite, for nowhere is it written that, once we've finished reading a book, there is no reason to read another. Nonetheless, there will undeniably come a day when we will stop reading altogether, as mortality claims us.