Hyperhistory and the Philosophy of Information Policies

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More people are alive today than ever before in the evolution of humanity. And more of us live longer and better today than ever before. To a large measure, we owe this to our technologies, at least insofar as we develop and use them intelligently, peacefully and sustainably.

Sometimes, we may forget how much we owe to flakes and wheels, to sparks and ploughs and to engines and satellites. We are reminded of such deep technological debt when we divide human life into prehistory and history. That significant threshold is there to acknowledge that it was the invention and development of information and communication technologies (ICTs) that made all the difference between who we were and who we are. It is only when the lessons learnt by past generations began to evolve in a Lamarckian rather than a Darwinian way that humanity entered into history.

History has lasted six thousand years, since it began with the invention of writing in the fourth millennium BC. During this relatively short time, ICTs have provided the *recording* and *transmitting* infrastructure that made the escalation of other technologies possible. ICTs became mature in the few centuries between Guttenberg and Turing. Today, we are experiencing a radical transformation in our ICTs that could prove equally significant, for we have started drawing a new threshold between history and a new age, which may be aptly called *hyperhistory*. Let me explain.

Prehistory and history work like adverbs: they tell us *how* people live, not *when* or *where*. From this perspective, human societies currently stretch across three ages, as ways of living. According to reports about an unspecified number of uncontacted tribes in the Amazonian region, there are still some societies that live prehistorically, without ICTs or at least without recorded documents. If one day such tribes disappear, the end of the first chapter of our evolutionary book will have been written. The greatest majority of people today still live historically, in societies that rely on ICTs to

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record and transmit data of all kinds. In such historical societies, ICTs have not yet overtaken other technologies, especially energy-related ones, in terms of their vital importance. Then, there are some people around the world who are already living hyperhistorically, in societies or environments where ICTs and their data processing capabilities are the necessary condition for the maintenance and any further development of societal welfare, personal well-being, as well as intellectual flourishing. The nature of conflicts provides a sad test for the reliability of this tripartite interpretation of human evolution. Only a society that lives hyperhistorically can be vitally threatened informationally, by a cyber attack. Only those who live by the digit may die by the digit.

To summarise, human evolution may be visualised as a three-stage rocket: in prehistory, there are no ICTs; in history, there are ICTs, they record and transmit data, but human societies depend mainly on other kinds of technologies concerning primary resources and energy; and in hyperhistory, there are ICTs, they record, transmit and, above all, process data, and human societies become vitally dependent on them and on information as a fundamental resource.

If all this is even approximately correct, the emergence from its historical age represents one of the most significant steps taken by humanity for a very long time. It certainly opens up a vast horizon of opportunities, all essentially driven by the recording, transmitting and processing powers of ICTs. From synthetic biochemistry to neuroscience, from the Internet of things to unmanned planetary explorations, from green technologies to new medical treatments and from social media to digital games, our activities of discovery, invention, design, control, education, work, socialisation, entertainment and so forth would be not only unfeasible but unthinkable in a purely mechanical, historical context.

It follows that we are witnessing the outlining of a macroscopic scenario in which an exponential growth of new inventions, applications and solutions in ICTs are quickly detaching future generations from ours. Of course, this is not to say that there is no continuity, both backward and forward. Backward because it is often the case that the deeper a transformation is, the longer and more widely rooted its causes are. It is only because many different forces have been building the pressure for a very long time that radical changes may happen all of a sudden, perhaps unexpectedly. It is not the last snowflake that breaks the branch of the tree. In our case, it is certainly history that begets hyperhistory. There is no ASCII without the alphabet. Forward because it is most plausible that historical societies will survive for a long time in the future, not unlike the Amazonian tribes mentioned above. Despite globalisation, human societies do not parade uniformly forward, in synchronic steps.

Given the unprecedented novelties that the dawn of hyperhistory is causing, it is not surprising that many of our fundamental philosophical views, so entrenched in history, may need to be upgraded, if not entirely replaced. Perhaps not yet in academia, think tanks, research centres or R&D offices, but clearly in the streets and online, there is an atmosphere of confused expectancy, of exciting, sometimes naive, bottom-up changes in our views about (a) the world, (b) about ourselves, (c) about our interactions with the world and (d) among ourselves.

These four focus points are not the result of research programmes or the impact of successful grant applications. Much more realistically and powerfully, but also more confusedly and tentatively, the changes in our *Weltanschauung* are the result of our

daily adjustments, intellectually and behaviourally, to a reality that is fluidly changing in front of our eyes and under our feet, exponentially, relentlessly. We are finding our new balance by shaping and adapting to hyperhistorical conditions that have not yet sedimented into a mature age, in which novelties are no longer disruptive but finally stable patterns of 'more of approximately the same' (think, for example, of the car or the book industry, and the stability they have provided).

It is for this reason that the following terminology is probably inadequate to capture the intellectual novelty that we are facing. Our very conceptual vocabulary and our ways of making sense of the world (our semanticising processes and practices) need to be reconsidered and redesigned in order to provide us with a better grasp of our hyperhistorical age, and hence, a better chance to shape and deal with it. With this proviso in mind, it seems clear that a new philosophy of history, which tries to makes sense of our age as the end of history and the beginning of hyperhistory, invites the development of (see the four points above) (a) a new philosophy of nature, (b) a new philosophical anthropology, (c) a synthetic e-nvironmentalism as a bridge between us and the world and (d) a new philosophy of politics among us.

Six thousand years ago, a generation of humans witnessed the invention of writing and the emergence of the State. This is not accidental. Prehistoric societies are both ICT-less and stateless. The State is a typical historical phenomenon. It emerges when human groups stop living in small communities a hand-to-mouth existence and begin to live a mouth-to-hand one, in which large communities become political societies, with division of labour and specialised roles, organised under some form of government, which manages resources through the control of ICTs. From taxes to legislation, from the administration of justice to military force and from census to social infrastructure, the State is the ultimate information agent and so history is the age of the State.

Almost halfway between the beginning of history and now, Plato was still trying to make sense of both radical changes: the encoding of memories through written symbols and the symbiotic interactions between individual and *polis*—State. In fifty years, our grandchildren may look at us as the last of the historical, State-run generations, not so differently from the way we look at the Amazonian tribes, as the last of the prehistorical, stateless societies. It may take a long while before we shall come to understand in full such transformations, but it is time to start working on it.