

THE GRAND NARRATIVE TOLD BY THE SCIENCES

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For a few decades now, all scientific disciplines have been able to date their objects. Cosmic radiation shines throughout, in memory of the Big Bang; thanks to radioactivity, geophysics dates the birth of the Earth and palaeontology that of fossils; the Burgess Shale teaches us that animals did not have hard body parts before the Cambrian age; by carroting ice in Greenland, we can even determine the year in which certain climates, techniques or diseases appeared.

Astrophysics teaches us that this Big Bang took place fourteen billion years ago; Earth physics dates the achievement of its definitive form, by accretion, to 4.7 billion years ago; from biochemistry we learn that the first living molecules, capable of duplicating themselves, began invading the planet 3.8 billion years ago; natural history lists the emergence of each species, with pluricellular organisms succeeding eukaryotes and the latter succeeding prokaryotes; sometimes it can enable us to know the hour in which they disappeared; volcanic eruptions or the impact of aerolites, five huge catastrophes marked the evolution of living beings by a few quasi-eradications; about seven million years ago, a species close to us, and yet still distant, rose on the shores of Lake Chad, another, later one, in the Kenyan Rift; a handful of these men left their cradle in the African continent, *Homo erectus* before *Homo sapiens*; the latter left one hundred thousand years ago and very rapidly colonised the face of the Earth; Australia, sixty thousand years ago and, via Beringia, the American continent, undoubtedly thirteen or twenty thousand years ago.

Over the space of a few decades, multiple discoveries linked all disciplines in a common gesture of chronometry. Subject to amendment depending on the advances of research, these dates, properly picked out, succeed one another, forming a Grand Narrative of which the shoots and branches will quickly become the temporal horizon for the future genera-

tions, their tradition, their shared heritage, without cultural distinctions. Now, this Grand Narrative of our Universe, of our World and of our Humanity has a trunk and some branches, the shape and ramifications of which replace the circle of the old encyclopaedias. Anyone can tell at leisure to his children, in five minutes or in an hour, the story of the first explosion, Planck's barrier, the subsequent cooling, the arrival of water on a certain planet, fragile and blue, the evolutionary passage from single cell organism to more complex living beings, soft-bodied at first and hard-bodied later, the flourishing of plant and animal species from branch to branch, the emergence of several human varieties which coexisted for a long time, a biped's loss of fur whose metamorphoses concern us, the invention of fire... an exciting scenario, dotted with unforeseeable and contingent dramatic turns of events... where science, on its own and without translation, seems to leave the realm of calculations and equations to become literature; together, the various disciplines tell the huge adventure of the objects they deal with; finally, the technical languages of all sciences, as simple but as difficult as those of mathematics, converge towards an everyday, vernacular language which is accessible to everyone. The whole of what was once called Encyclopaedia thus carries into this complex narrative, whose tale may be made up of a few words told by a mother to her child one night in front of the fire or contained in several million CD-Roms, which only the specialists can decipher. The further we advance in science, the further away we move from the elementary enunciation of this canonical and extremely simple Narrative.

What shall we thus call the entire breadth of scientific knowledge? The answer is: the Grand Narrative. Can I get acquainted with it? Of course: I have just told it in a nutshell. It synthesises all that science invents and explains. Like tributaries, all the disciplines flow into this river and feed it incessantly. The Grand Narrative groups and synthesises them. Paradoxically, we can know everything, all we need is to tell the Grand Narrative.

The Cultural Mosaic

However, nothing in this long epic will console or protect us from misunderstanding one another because we do not speak the same language, from hating one another because we do not practice the same religion, from exploiting one another because those who do not live at the same economic level lack defences, from persecuting one another because we

do not have the same form of government... and nothing prevents us from murdering one another for all these reasons. Worse still, the old humanism did not spare us from the daily violence in history, the slaughter of Gauls, of the Native Americans, of the Catars or of the aborigines, nor from Auschwitz or Hiroshima. Sciences do not give meaning; only cultures give meaning.

We writers or researchers, sometimes humanists, do not have available, and very happily so, political power, or armed forces, or money. We would not make better use of them than anyone else. How few of the so-called cultured men know that the real, universal culture is the one that prevents a cultured man from crushing anyone under the weight of his culture? Thus we have nothing available except language and, at times, *teaching*. We have no choice but to work in the long term. Precisely the time frame of the Grand Narrative. Therefore how should we reply, with our specific means, to these sorrowful questions, which are reiterated everyday by the problem of evil and leave us disconsolate? How can we work towards peace, which is the greatest of all collective goods? How can we invent a new culture? Not by thinking about it, speaking about it or holding meetings which are always useless but by really contributing to it? I suggest a specific action, again derived from the Grand Narrative. Here it is.

Appeal to the Universities of the Entire World for a Common Knowledge

A common pedagogical trunk, which would unite little by little all of mankind, starting with students, would pave the way for the progress of peace.

I ask the presidents of the Universities of the entire world to devote the first year of teaching to a common programme, which would enable students of all disciplines and all countries to have the same background in knowledge and culture; they, in turn, would disseminate it.

I am suggesting to them only a general framework which they could mould according to their specialisation, culture and goodwill. It is inspired by the following considerations:

- 1) Being universal, hard sciences can be taught according to the Grand Narrative.
- 2) With respect to cultures, they form a highly diversified mosaic, inspired by languages, religions and politics. Pedagogy assimilates this body of differences.

Common Programme for the First Year of the Universities

1) The unified grand narrative of all the sciences

Elements of physics and astrophysics: *the formation of the Universe, from the Big Bang to the cooling of the planets.*

Elements of geophysics, chemistry and biology: *from the birth of the Earth to the appearance of life and the evolution of the species.*

Elements of general anthropology: *emergence, spread and prehistory of the human genus.*

Elements of agronomy, medicine and transition to culture: *the relationship between man and the Earth, Life and Humanity itself.*

2) The mosaic of human cultures

Elements of general linguistics: *geography and history of the language families. Communication languages and their evolution.*

Elements of the history of religion: *polytheism, monotheism, pantheism, atheism...*

Elements of political sciences: *the various kinds of government.*

Elements of economics: *the sharing of resources throughout the world.*

Masterpieces chosen from the wisdom of the world and of the arts: literature, music, painting, sculpture, architecture... *Sites*: world heritage sites according to UNESCO.