## SUMMARY

Modern science unanimously sustains the Darwinian hypothesis on the origin of man. This is a logical consequence of the materialist belief that there is a fundamental continuity within all mineral, living and human beings. The materialist belief goes against the religious belief in the existence of a Supreme Being, who created a multitude of separate beings (created substances). The doctrine of creation has a double origin. One is rooted in the increasingly comprehensive knowledge of the Universe. The other one is rooted in the text of the Holy Bible. According to the Bible the Universe is not continuous, but consists of separate, irreducible forms of existence, like the mineral world, the multitude of plant and animal kinds, and Man on top of it.

Modern science accepted the Darwinian view on the close relation between apes and man. Paleobiologists have found a great number of fossils which seem rather human-like, but not exactly so. These fossils, therefore, are regarded as a kind of link between the genealogy of apes, and the genealogy of *Homo sapiens*. Consequently the scientists called them "an ape", "apeman", "quasi-man", or "presapient" man.

It is rather difficult to evaluate these hypotheses. The fossil material is often a million or even several million years old. It is fragmentary and mineralized. On the other hand the changes in the environment and technical progress have most probably influenced the once living structures of the early "hominid" body.

During the last ten thousand years (the Holocene epoch) the population of *Homo sapiens* was far from homogeneous. Four or five natural races (ecotypes) of modern man can be distinguished. The ecotypes manifest an inner, developmental and adaptive potential of mankind. One might ask if it is possible that during the glacial epoch or earlier, in the Pliocene epoch, the adaptive potential had worked in the same way but the range of its manifestations was proportionally broader. What is the true range of the potential which was manifested in the Holocene?

In spite of the often repeated declarations to the contrary, there is no way to conciliate the contemporary scientific and the fundamentally religious "Weltanschauung".

One has to distinguish between the "scientific views on the Cosmos" and the "natural knowledge" of the Cosmos. Scientific views on the Cosmos are changeable. Over centuries the interpretation of the same physical, astronomical, biological phenomena has changed many times, and will certainly change in the future. The obligatory corset of more or less explicit "methodological principles" had changed since the Platonic and Aristotelian idiom. During the Middle Ages the Thomist intellectual scheme was regarded as relevant. Finally with the Enlightenment the previous, theological corset was replaced by the materialist paradigm and the materialist "methodology of sciences".

The natural knowledge of the Cosmos, however, is not dependent on methodology. Methodology of the natural knowledge is dependent upon the evidence. The evidence is the ultimate principle of knowledge. It is the evidence which directs the technological advance in the perfection of the observational tools. A common effort of scientists consists in gathering new data and the observation of the details which previously were hidden. The accumulation of data opens a way to new insights into the mechanisms of biological processes, but these new insights cannot undermine the validity of the original observations and experiments. It is not true that "science" is conceptually neutral. Even without the methodological corset the achievements of "scientific activity" are not neutral. Observational data influence the intellectual concept of Cosmos and its origin. They either confirm the religious beliefs, or not.

It is important to recall the philosophical theory of the Double Truth.

"While a proposition is true from the philosophical point of view and can be demonstrated by reason, an incompatible proposition, which is therefore false philosophically, can be true by revelation in religion" (Coppleston).

This theory was rejected by the Catholic Church. According to the Catholic belief man is able to guess that all the substantial beings in Cosmos were created by a Power which is Intelligent, Almighty, Loving, worthy of Adoration and Obedience. On this point there is no valid distinction between the "scientific knowledge of the Cosmos" and the teaching contained in the Holy Bible. There is just One Truth. The teaching of the Bible is acceptable to our reason because it fits to the deepest guesses of human mind.

The natural knowledge of God leaves some mysterious, unresolved questions, mainly concerned with the drama of death and sufferance. The Mystery of Death, however, cannot erase or diminish the overwhelming evidence of Power, Wisdom, and Beauty of the God's deeds. Transcendental mystery which remains unsolved is comparable with the ignorance of scientists, who also confront many unanswered questions.

The Darwinian hypothesis on the origin of *Homo sapiens* has a complex theoretical structure. It postulates a logical possibility of dynamism, which tends towards perfection, although it is driven by the blind, aimless forces of the inanimate matter. These aimless forces "created" the earliest, primitive form of life (the Common Ancestor of all the living substances). The same aimless forces modified the primitive DNA molecule into the genomes of plants and animals. The same aimless forces (mutations and natural selection) further shaped the DNA molecule of a primitive primate. Finally, the chaotic, blind results of the purely physical dynamism culminated in the DNA of mankind, i.e. reached the "sapient" form of existence. No Creator is necessary.

The Darwinian hypothesis contradicts the beliefs of religious men, and the teaching of the Hebrew "holy scripture". If the idea of a Creator is illusionary, then the religious authority of the Bible is null. The reconstruction of the origin of mankind, therefore, is of utmost importance in the clash between the atheist and religious convictions.

The theoretical controversy is further complicated because the present-day geological data are not compatible with the literal interpretation of the biblical narratives. The Bible, however, leaves many white spots of ignorance. Its revelations are obviously incomplete. The American and Australian continent, polar races of man, the glacial epoch with woolly elephants and woolly rhinoceroses... and many other elements of our present knowledge are missing in the narration of the Bible. The incomplete narration of the Bible, however, can be true, as our incomplete accounts of history are true. The Catholic Church does not require a literal interpretation of the word "day". A biblical "day" may be understood as an indefinite period of time between the separate acts of creation.

Paleoanthropological research is founded upon fragmentary, modified, and damaged evidence. Teeth and bones are over-represented and constitute about 90% of

the fossil data. Consequently the locomotory system and the masticatory system of our ancestors can be reliably reconstructed. Other, equally essential systems and dynamisms of our body, quickly decompose, disintegrate and leave no trace in the record.

The human system of locomotion is unique and has no equivalent in the animal world. Human bipedalism is evident in the fossil remains of the early Pliocene, no less than 4 million years ago. The fossil data, therefore, do not confirm the expectations of the Darwinian hypothesis.

The human system of mastication is also unique. The spatial proportions of early man's skull are, possibly, more apelike. The brain case is relatively small, while the jaws are relatively robust. However, the more essential traits of the earliest, relatively complete specimens of hominid jaw and maxilla are even less apelike than our own dentition. 3 to 1.5 million years ago, the dimensions of the skull and the robusticity of the jaws were increasing. Later, the dimensions of the neurocranium were further increasing, while paradoxically, the robusticity of the jaws has been in decrease until the present day.

The modifications of the spatial proportions of the hominid skull can be interpreted as an example of the allometric adaptation to the processed and/or cooked food. The size of the neurocranium follows the dimensions of the whole body, while the size of the masticatory structures is adapted to the masticatory dynamism.

Locomotion and mastication are not – directly – linked with the intellectual capacities of mankind. It is necessary to distinguish between intelligence and the intellectual capacities. Intelligence is an essential attribute of every living being (including bacteria). It is a necessary prerequisite of the selective and manipulative potential of these beings. Man's brain fits well – in its quantitative parameters – to the mammalian brain size scale. No relevant correlation was found between the dimensions of brain and the intellectual capacities of men. The brain size of an intellectually fully developed man is well below 400 cm<sup>3</sup>. The early hominids called "australopithecine" that lived 4 million years ago, the "hobbits" (Flores Island) who lived 18 thousand years ago, and the little *Homo sapiens* (Palau archipelago) who lived some 3 thousand years ago, had – roughly speaking – the same brain size.

The intellectual activity of man consists in a capacity to investigate the deeper structure of the surrounding mineral or living bodies, in a tendency to discover the origins of Cosmos, the origins of Life, the origins of mankind. This activity – in its most sublime form – leaves no trace in the material structures. It is conveyed in the form of stories, tales, myths, rites, dance and songs. The early man who lived millions years ago has left very scarce traces of his intellectual capacity. His relatively slow system of locomotion and the lack of any biological structures of defence (the lack of long and sharp canine teeth) may indicate that – in order to survive – early man had to use weapons made from wood, bones or stone. The earliest recognizable forms of stone tools were discovered in the geological strata dated 3,5 million years ago.

A hundred years ago evidence of the intellectual activity of early man was estimated rather late – within the last million years. Gradually, because of new findings, this "limit" has been reassigned several times – always deeper in the past.

The current domination of the Darwinian hypothesis of the common origin influences the interpretation of fossils. It seems, however, that fossils indicate a common origin of all the archaic and contemporary man. It confirms the expectations of the creationist belief, that the earliest man was as different from other animal forms as he is nowadays.

The gap between hominids and other primates should not be regarded as a kind of anomaly. The hypothetical Tree of the Common Descent does not exist in the fossil record. The fossil record is full of gaps. These gaps, however, are not random. Up to the level of the taxonomical family, the newly discovered fossils usually fill the gaps between the genera and species. But the gaps between the orders, classes, and phyla ... and so on, remain open. One might say that if the continuity between hominids and apes were finally confirmed by fossil evidence, this would constitute an anomaly without equivalent in the whole animal kingdom.

In spite of the essential and well-known differences between the fossil hominids and the living or fossil apes, one can observe a "scientific" tendency to dress the fossil hominid skulls in an apish skin. Not only "science fiction" journalist products, but even school textbooks abound in such awful reconstructions, founded upon the Darwinian hypothesis rather than the actual fossil evidence. The locomotory behaviour of the early hominids is also, quite often, reconstructed in a way which is designed to convince the reader that biologically the hominids were half-way between apes and man.

The Darwinian hypothesis produces some paradoxes. Holocene man is polymorphic. At least five different ecotypes can be observed in the "primitive" populations of *Homo sapiens*. The characters of some present day ecotypes are recognizable in the fossil record of the supposedly "presapient" hominids. Either the present day ecotypes crossed the level of "sapientization" more than once (polyphyletic hypothesis), or just once. If it happened just once (monophyletic hypothesis), then how we do explain that the "presapient" hominids had the same adaptive potential as the *Homo sapiens*?

Recently two insular populations of hominids have been discovered. One lived some 18 thousand years ago and left the evidence of the developed stone-tool culture. The "hobbits" from the Flores Island had many skeletal traits of the early hominids who lived millions years earlier. Their brain was within the range of small australopithecine people. A second newly discovered population of dwarfish man lived just 3 thousand years ago on the Palau archipelago (Pacific Ocean). In spite of their tiny brains (within the range of the australopithecine and the Flores Hobbit) the Palau dwarfs have to be incorporated into the polymorphic species of *Homo sapiens*. All this may indicate that the early hominids were "sapient", as far as the fossil record can corroborate such an intellectual quality.

The anatomical data do not confirm Darwinian hypothesis. Brain size cannot be used any longer as a means to prove a genetic continuity between man and ape. Several scientists therefore have tended to establish a totally different approach, namely the comparison of fossil DNA samples with samples of the human and pongid DNA. This new approach, however, seems rather superficial. It disregards the anatomical and behavioural reconstructions. The fragments of the DNA selected for the reconstruction have no relation to the higher levels of the body structure, and according to present knowledge do not participate in the processes of development or adaptation.