The Human Evolution – Past, Present and the Future

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Abstract

Just as the title itself suggests, the present article represents a synthesis of the information pertaining to the origins of the modern human being, the history of his becoming, his departure from Africa (the cradle from where he emerged) and his conquest of Earth, his transition from nomadic behaviour and the hunter-gatherer occupation (which spanned most of his existence) to the shepherd-farmer one, as well as the consequences of this so-called revolution on the evolution, of his social relationships and on the gradual progress made in all spheres of his activity over the past 10,000 years. The question is whether or not man evolved after his emergence about 200,000 years ago and migration from Africa. One chapter of this paper is dedicated to this aspect, bringing a series of arguments to attest that man has continued to evolve biologically and that, depending on the specific conditions of environment and life, diseases faced over centuries and millennia etc, he has undergone not only spiritual and cultural ones but also some genetic changes. Some obvious questions arise as to whether the evolution of man as a species has ended or he will still evolve in the future, the perspective of this process in view of the conditions of huge progress in various technologies, medicine, biology and molecular genetics, genetic engineering (intervention tool in its very genetic structure) as well as regarding the fulfilment of perhaps its most daring dream - that of conquering other planets. The last chapter of the paper tries to offer solutions to these challenges.

Keywords: origin of man, species of Homo, human evolution, man of the future

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Introduction

What do we actually mean by evolution as a biological phenomenon? It is the gradual process through which variations in characteristics determined by changes in the genetic material of a species place the affected organism in a more favourable situation under certain environmental conditions, and, as a result of the intervention of natural selection, these variations are perpetuated and become common over time within a group of individuals that deviate from the initial type. If we refer to man, the fact that he is the end of his evolutionary line may induce the idea that, in his case, evolution has ceased. This way of seeing things is also fuelled by an irrefutable reality, namely that in the modern age man has somehow escaped from the pressure of natural selection, that he is able to create artificial