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SOME ASPECTS OF THE RELATIONSHIP BETWEEN CONTINUITY AND DISCONTINUITY IN ANTHROPOGENESIS

ABSTRACT. — The process of anthropogenesis is discussed from the point of view of dialectical materialism. Unlike the mechanistic materialist view refusing discontinuity and various idealistic approaches denying continuity, the dialectical unity of both is emphasized. The theory of two qualitative leaps is considered and against it a new conception is suggested of one qualitative leap connected with the origin of intentional labour preceded by a series of "partial" qualitative leaps. It is then discussed on the basis of palaeontological and archaeological findings of the last two decades. The period of Ramapithecines and Australopithecines is viewed as a preparation phase when the biological prerequisites for the origin of human society developed. *Homo habilis* is assumed to have been the first human hominid followed by *H. erectus* and *H. sapiens neanderthalensis*. The appearance of the fossil type of *H. sapiens* some 40 to 30 thousands years ago is viewed as the "irreversibility point" of this qualitative leap. The biological and the social forms of motion of matter are viewed each as a discrete qualitative state.

KEY WORDS: Anthropogenesis — Biological and social forms of motion of matter — Qualitative leaps — Continuity and discontinuity — Labour — Biological prerequisites of the origin of man — *Homo habilis* — *Homo erectus* — *Homo sapiens neanderthalensis* — *Homo sapiens sapiens fossilis*.

The theoretical interpretation of palaeanthropological and archaeological data the amount of which has considerably increased in the past decades and in particular in the recent years, has also put new life into the discussion on the problem of continuity and/or discontinuity in anthropogenesis. It is mainly due to varied philosophical concepts of development, since there exist two different views on this subject.

The vast majority of the materialistically oriented scientists of the West mainly tend to generalize the concept of continuity with regard to their direct subject of research, i.e. the human evolution (Heberer, 1968; Remane, 1972; Schindewolf, 1972 etc.). Following the tradition of thinking of the advanced naturalists in the nineteenth century with

the mechanistic concept of development they oppose, above all, the idealistic mystification of discontinuity in anthropogenesis as pursued by western scholars in the humanities, and mainly by theologians even today.

The basic philosophical question put by mechanistic materialists among the western scientists is continuity or discontinuity. The decision made by them is in favour of continuity and against discontinuity which, as opposed to continuity, is considered to be a phenomenon which is not materially determined and, consequently did not occur in the process of anthropogenesis. However, this attitude makes it impossible for them to fully comprehend the evolution of mankind from animal ancestors and to disprove the idealistic and metaphy-

sical interpretation of the origin of man. As a result of the mechanistic concept of development, most scientists of the West are unable to recognize the leading factor in human evolution, i.e. the element of labour. They assume, in principle, that it was biological factors alone that were effective both in human evolution and in the evolution of other beings (Darlington, 1971). This, however, reduces this process to the purely biological level.

Contrary to the mechanical materialists, those authors who are typical representatives of the dialectic and historical materialism are guided in their research of anthropogenesis by the concept that both continuity and discontinuity are materially determined and constitute a dialectical unity. Their main concern is to expose the discontinuities, above all the qualitative leaps in anthropogenesis, as this enables us to recognize not only "other", but also "new" and "higher qualities" (Plesse, 1967; Hörz, 1974), just as the basic driving factors of this process.

The philosophical thesis of the human evolution as a materially determined transition, both continuous and discontinuous, from animals to mankind, in other words, from the biological to the social form of motion of matter, caused above all by labour was formulated for the first time by Engels (1962, 1963).

On this methodological basis and making use of the latest relevant discoveries in this field, some anthropologists and ethnographers mainly from the USSR have developed since the thirties various "leap theories", one of which is the "theory of two qualitative leaps in anthropogenesis", which has attracted special attention (Roginskiy, 1936, 1951, 1969; Yakimov, 1951; Semenov, 1962, 1966 etc.). Recently this theory has been further developed into the "theory of a single qualitative leap with two turning points in anthropogenesis" (Roginskiy, 1977), thus confirming Engels' thesis at a higher level of knowledge, simultaneously putting it into more concrete terms.

The aforementioned theories are based on the assumption of a relatively long transitional phase from animals to mankind, which constituted a *growing* phase of man and of the human society, when biological evolutionary laws dominated at the beginning and the social ones at the end of the process. The theories assume that the first man (genus *Homo*) and the initial human society (band society) developed as a result of the first qualitative leap (or at the first turning point), whereas the first fully developed human being (*Homo sapiens sapiens*) and the fully developed human society in terms of the first mature socio-economic system (gentile society) occurred as a result of the second qualitative leap (or at the second turning point). Different opinions are expressed concerning the coordination of the discovered remains of hominids especially to the first qualitative leap (or the first turning point).

However, some authors, preferably archaeologists have raised doubt as to the concept of a relatively long transitional phase from animals to mankind and, thus, of two qualitative leaps or a single

qualitative leap with two turning points in anthropogenesis. On the one hand, the first human beings and their communities are considered to be fully developed human beings and fully developed human society in terms of a mature socio-economic formation (Bryusov, 1953; Boriskovskiy, 1970; Kraynov, 1970 etc.). In the author's opinion this is an unjustified overestimation of the impact of the social factors in the process of anthropogenesis. On the other hand it is claimed that the first and later representatives in human evolution (*Homo habilis*, *H. erectus* and at least in some cases *H. sapiens neanderthalensis* and their societies) were animal-like rather than human, and were governed by purely biological laws of development. According to this concept, man and his society developed as late as with the appearance of the late *Homo sapiens neanderthalensis* (Porshnev, 1955, 1974). In my opinion, this seems to be an overrating of the effects of the biological evolutionary factors in anthropogenesis.

The numerous different concepts as to the number, classification, mechanisms and character of qualitative leaps in anthropogenesis have mainly resulted from (i) different philosophic comprehensions of the qualitative leap, (ii) from assuming, interpreting and using different biological and social criteria, especially the criterion of labour and (iii) different theoretical interpretation of palaeanthropological and archaeological material (Foerster, 1978, 1980).

Based on the latest scientific discoveries made in many branches of science and philosophy, the anthropogenesis may be considered as a single qualitative leap when thinking of the dialectical transition from animals to mankind on the whole, i.e. from the biological to the social form of motion of matter. However, the anthropogenesis was an extremely complex process and it covered a great number of elementary qualitative "partial" leaps of variable classifying features (more or less important, considerable, eminent etc.), which resulted in a series of stages of the development of man and his society. Each of these "partial" qualitative leaps occurred on the basis of the preceding qualitative "partial" leaps as well as under particular historical conditions. Moreover all such leaps were an important precondition for successive qualitative "partial" leaps as well as for the total (complex) leap from the biological to the social motion forms of matter.

The very phase of the qualitative leap occurring from the biological to the social forms of matter was marked by two "marginal values", which can be defined as "turning points" (Roginskiy, 1977). However, according to Plesse (1967) they should be referred to as "induction point" and "irreversibility point". These "marginal values" must be considered in terms of phases either. While the "induction point" was characterized by the fact that the quantitative (and qualitative) changes preparatory to the qualitative leap from the biological to the social motion forms of matter, it did not only lead to the reproduction of the biological form of mo-

tion, but it also caused typical features of the social motion to develop, although in a primary stage only, the "irreversibility point" which characterizes the moment at which the threshold was reached by accumulation and further development of the induced features essential to the social form of motion. Since this moment the social motion form has not only existed in a complex manner, but was also stabilized and became irreversible. Contrary to Roginskiy (1969, 1977), the author believes that the "induction point" and the "irreversibility point" are interrelated so that the second point is unthinkable without the first, however without being its necessary consequence. A "sensible" transition phase existed between the two "marginal values"; various quantitative (and qualitative) processes took place in this phase in an inconsistent way. It was since that moment that the emerging new (higher) phenomena "struggled" with the previous (lower) ones and the developing system was still very much dependent on outside factors.

The author considers the "induction point" to have occurred at the moment when the first hominids started with material productive activities laying thus the foundations for the first human beings and the first human society. According to the latest findings made in this field, the process took place within certain populations of the gracile *Australopithecus africanus* at least three million years ago. The habilines (*Homo habilis*) are assumed to be the first human hominids, with their hands forming the first human society. In agreement with the general opinion, the author shares the view that the "irreversibility point" of the qualitative leap occurred at a time when the fossil type of *Homo sapiens sapiens* and the gentile society initially appeared, i.e. 40,000–30,000 years ago. The growing of both the present-type human beings and their society took place in the "sensible" phase of the qualitative leap, during which phase the archanthropines (*Homo erectus*) and palaeanthropines (*Homo sapiens neanderthalensis*) emerged.

Thus it becomes evident from the present state of our knowledge that the qualitative leap from the biological to the social form of motion of matter lasted for some three million years, preceded, however, by an even longer phase of preparation and gradual approach. It was during this earlier phase that the biological prerequisites and the basis for the origin of man and human society developed. From the viewpoint of palaeoanthropology, this phase was represented by the Ramapithecines and the Australopithecines, or at least by the majority of the latter ones.

Taking place in a dialectical unity of biological and social laws, labour in the form of material production was the major driving factor of the qualitative leap from the biological to the social forms of motion of matter. However, while forming the evolution of man and his society, the material production passed through a process of development to become the first fundamental basis of all human life (Engels, 1962).

The qualitative leap from the biological to the

social forms of motion of matter (as well as the other qualitative "partial" leaps in anthropogenesis) was neither an indeterminated, acausal and mystical event, nor may it be reduced to a purely mechanistic process. It formed a materially determinated, dialectical unity between continuity and discontinuity, between gradually quantitative and desultory qualitative changes. Thus the gradual quantitative changes of preparatory phase of the qualitative leap at the lower level accompanied by leap-like qualitative changes. In the course of the qualitative leap proper, gradual quantitative changes (at the lower level) took place which were characterized by features different from those of the preparatory phase. Being the *result* of the qualitative leap from the biological to social forms of motion of matter, the latter is an expression of discontinuity. There is no mediation between the social and the biological motion forms. They constitute two discrete states facing each other and being separated by a qualitative leap. The one qualitative state occurred prior to the qualitative leap, the other one after. In turn, it is the qualitative leap, that forms the mediating link. If the social form of motion is seen not only as the *result* of the qualitative leap, but also as its *development* in the course of this event, then the continuous relation between the two forms of motion becomes evident. Both these discrete qualitative states were interlaced by materially determinated quantitative phenomena. Due to this mediation it is impossible to arrive at an acausal, indeterminated and mystical concept of the qualitative leap in anthropogenesis. However, the social form of motion did not emerge from the biological one in purely mechanistic terms either. The former evolved from the latter through dialectic negation, i. e. in terms of (i) preservation, (ii) preservation and raising to a higher level, and (iii) liquidation of the biological in the social forms of motion of matter.

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