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关于生物变异的偶然性和必然性

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摘要 仍是重要的课题生物的变异是偶然的，还是有规律可寻的必然？米丘林学派认为生物的变异是完全必然的，“任何特性的遗传性之变异，都与外界环境条件的影响一致或符合”[1]。因此，李森科有一句名言：“要把偶然性从生物学中驱逐出去”。另一方面，基因学派始终认为生物的变异是基因的偶然突变。六十年代分子生物学的兴起，似乎从脱氧核搪核酸（DNA)及其机能单位中找到了基因突变的新的强有力的论证。分子生物学家莫诺在其风靡西方世界的名著《偶然性和必然性》中，宣称“只有偶然性才是生物界中每一次革新和所有创造的源泉”，“进化这座宏伟大厦的根基是绝对自由的，且是盲目的纯粹偶然性”。在他看来，生物界的一切物种，甚至人类，都不过是“在蒙特卡罗赌窟里中签得彩的一个号码妙。你要认为变异有规律，有必然性吗？那你就是承认“宇宙中存在着一种意向”，你就是“万物有灵论”，并侮称这就是“从西方的原始文明到辩证唯物主义的世界观”[2]。莫诺并不认为他的这些观点仅是生物学的结论，在他这本书1971年通俗版的扉页上，特别加上一个副题：“获得诺贝尔奖金的法国生物学家所提出的一个无因果关系的宇宙哲学”，看来莫诺先生自认为已经找到了宇宙发展的终极真理了。

关键词
分类号

ON CHANCE AND NECESSITY IN MUTATIONS OF LIVING THINGS

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Abstract

On the basis of the fundamental principles of dialectical materialism, the writer of this paper holds that chance and necessity in mutations of living things are both objective realities, depending on each other for existence at the same time and acting upon each other at the same time. Certain chances are always governed by certain necessary conditions. The question does not lie in the fact that the occurrence of chance is a necessity, but rather, the occurrence of what kind of chances is a necessity.'Starting from this, the writer advances the concept of two types of accidental mutations.

The first type of accidental mutations refers to individual mutations generated from the continual changes in various influencing factors within a specific system. This occurrence represents a chance governed by a given code of genetics. The second type cf accidental mutations refers to individual mutations resulting from the sudden application of factors outside the given system, though not controlled by the given genetics laws, they are nevertheless not absolutely free or blind and are necessarily included in the new laws of genetics.

The two types of accidental mutations are under certain conditions intertransformable.

The writer, basing on these points of view, discusses a series of controversial cases in the genetics of living beings. Specifically, more detailed analysis of made of the question of drug resistance of bacteria, to give it a more rational explanation.

In the discussion, criticism is made on the theory of accidental changes in genes i:nd especially on Monod's falacy.

Key words

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