Some examples of possibology applied to biology and its history

Sylvie Allouche*1

¹Center for Ethics in Medicine, University of Bristol (CEM Bristol) – 39 Whatley Road BS8 2PS Bristol, United Kingdom

Abstract

Possibology is defined as the science of possibilities. In part, as is often the case with emerging disciplines, it appropriates a certain number of existing approaches that it describes as fulfilling its own program, but also proposes to apply its principles to fields in their infancy or non-existent, in order to develop an original research program. My goal here is to present some examples of application of possibology to biology which borrow from these two categories.

For the first, I take the example of exobiology, the science of extraterrestrial life: this science is particularly interesting from the possibology point of view insofar as it is an empirical science, but without the experience of its object. I am assuming that this is a unique case, but it needs to be checked.

For the second category, I will look at an important part of possibology, which I call uchronology, and whose aim is to develop, from the counterfactual analysis of historical sequences, a comparative "weighing" of the necessity of their elements. The idea will be illustrated by three examples: the history of cloning technique and its reception by society, the history of the notion of genetic program, the history of Mendel's laws of inheritance.

Owing to the experimental aspect of the approach, my purpose will mainly be to initiate a discussion with the audience according to the principles of comparative and counterfactual thinking. But if the method proves fruitful, it seems to me that eventually entire sessions could be devoted to this kind of inquiry.

^{*}Speaker