EVA, APPLE TREE (JABŁONKA IN POLISH) AND LAMARCK

Summary

The Polish title gives rise to many different associations. The first suggestion is Eden and tempting of Eva by L... on apple tree ('jabłonka' in Polish). "Faulty" Lamarckian ideas of "inheritance of acquired characteristics" (acquired information) and intentional adaptive changes in evolution are invoked and Readers are tempted to take them as contemporary correct. It is the "Lamarckian dimension" which follows Eva Jablonka and Marion Lamb books (1995, 2005). The second meaning of the title is the wordplay on Eva Jablonka's name as the main author of described ideas. The title of the above (2005) book – "Evolution in four dimensions" stresses the "heretic" thesis of other than genetic channels of hereditary information. These channels are the second main theme of the article. The known example of such heredity is an orchard apple tree (third connection), which inherits its characteristics not through genes. Understanding of the basic terms, "inheritance" or "acquired characteristics", is analyzed in the context of Jablonka's ideas. Further on, the developmental view of consecutive approximation of evolution theory is outlined. It is a view contrary to the commonly taken revolutionary one. In the past an inadequate revolutionary atmosphere was a cause of curios simplifications like e.g. popular thinking that hereditary characteristics are those defined by genes. It is true but only within specified boundaries of the first approximation. Reminding of the existence of forgotten assumptions which define areas of first approximation together with its main terms is the aim of this article. Being conscious of them opens the door to a second approximation and it is high time for it. Jablonka's works provide a leading overview of area of second approximation and contemporary examples confirming it. In the article I have tried to give a short description of this area therefore it practically became an abstract of her works, however, in-between I inserted a lot of my own explanations (similar to Jablonka's ideas, I hope).