Endosymbiosis Theory, the

This thesis was put forward in 1970 by Lynn Margulis, who claimed that bacterial cells turned into plant and animal cells as the result of symbiotic and parasitical activity. According to this thesis, plant cells emerged after a bacterium swallowed another photosynthetic bacterium cell. The photosynthetic bacterium supposedly evolved inside the devouring cell and turned into a chloroplast. Finally, organelles with very complex structures—such as the Golgi apparatus, endoplasmic reticulum and ribosome—somehow evolved inside the main cell. And thus plant cells came into being.

This thesis is nothing more than a figment of the imagination. Indeed, it has been criticized in many respects by many scientists regarded as authorities on the subject—D. Lloyd 141, Gray and Doolittle 142 and Raff and Mahler, for example.

The fact on which the endosymbiosis thesis is based is that the chloroplasts inside the cell have their own DNA separate from that of the main cell. Based on that distinction, it is claimed that mitochondria and chloroplasts were once independent cells. Yet when chloroplasts are examined in detail, the invalidity of this claim becomes apparent.

The points that invalidate the endosymbiosis thesis are as follows:

If chloroplasts had really once been swallowed by a larger cell when they were living independently, as is claimed, then the only one result would have been their digestion and use as food by the main cell. Even if we assume that the main cell did mistakenly absorb these cells instead of food, its enzymes would have digested them. Naturally, evolutionists may try to gloss over this point by claiming that the digestive enzymes had disappeared. But this is a manifest contradiction. If the digestive enzymes had vanished, then the main cell would have died for lack of nourishment.

Again, assume that all these impossible events actually took place and that the cells claimed to be the forerunners of chloroplasts were swallowed by the main cell. We now face another problem: the blueprint for all the organelles in the cell is encoded in DNA. If the main cell is to use as organelles other cells it has engulfed, then it needs to have the information concerning them coded in its DNA beforehand. Indeed, the DNA of the swallowed cells would have to possess information regarding the main cell. Such a thing is of course impossible. No living thing carries genetic information for an organ it does not possess. It is impossible for the DNA of the main cell and that of the engulfed cells to have later adapted to one another.

Within the cell, there is enormous harmony. Chloroplasts do not act independently of the cell to which they belong. In addition to being dependent on the main DNA in protein synthesis, the chloroplasts do not make the decision to multiply themselves. In any one cell, there are more than one chloroplast and mitochondrion. Just as with other organelles, their numbers rise or fall in line with cell activity.

The fact that these organelles contain their own separate DNA is of particular benefit when it comes to replication. As the cell divides, the chloroplasts also separate in two, thus doubling their numbers, so that cell division takes place more quickly and orderly.

Chloroplasts are vitally important generators of energy for the plant cell. If these organelles are unable to do so, many of the cell's functions cannot take place, and the organism will be unable to survive. These vitally important functions take place with proteins synthesized in the chloroplasts. However, the chloroplasts' own DNA is not sufficient for them to synthesize these proteins. The great majority of proteins are synthesized using the cell's main DNA.143

It is absolutely impossible for such harmony to have developed through trial and error. Any change in a DNA molecule will not gain the organism any new characteristic, but will definitely harm it.

Mahlon B. Hoagland describes the position in his book *The Roots of Life*:

You'll recall we learned that almost always a change in an organism's DNA is detrimental to it; that is, it leads to a reduced capacity to survive. By way of analogy, random additions of sentences to the plays of Shakespeare are not likely to improve them! . . . The principle that DNA changes are harmful by virtue of reducing survival chances applies whether a change in DNA is caused by a mutation or by some foreign genes we deliberately add to it. 144

Evolutionists did not produce their claims on the basis of any scientific experiments. No such phenomenon as one bacterium swallowing another has ever been observed. The molecular biologist Whitfield describes the situation:

Prokaryotic endocytosis [the taking in of matter by a living cell] is the cellular mechanism on which the whole of S.E.T. (Serial Endosymbiotic Theory) presumably rests. If one prokaryote could not engulf another, it is difficult to imagine how endosymbiosis could be set up. Unfortunately for Margulis and S.E.T., no modern examples of prokaryotic endocytosis or endosymbiosis exist . . . 145

There is no example of a bacteria that is left intact, without being digested, after being engulfed by another and which 'contributes' to the initiation of an even more complex cell in nature. Such a relationship between two bacteria is not definitely demonstrated in any laboratory experiments. That means such organisms are not alive in nature or in test tubes, but only in the minds of evolutionists. In reality, genes of eukaryotic cells are much different than the ones in prokaryotic ones and no evolutionary relationship exists in between them. D.F. Doolittle has a confession in an article in the *Scientific American* magazine:

*... many eukaryote genes are totally unlike those seen in the prokaryotes and archaea. They seem to come from no-where.*146

141 D. Loyd, *The Mitochondria of Microorganisms*, 1974, p. 476.
142 Gray & Doolittle, "Has the Endosymbiant Hypothesis Been Proven?," *Microbiological Review*, Vol. 30, 1982, p. 46.
143 Wallace-Sanders-Ferl, *Biology: The Science of Life*, 4th Edition, Harper Collins College Publishers, p. 94.
144 Mahlon B. Hoagland, *The Roots of Life*, p. 145.
145 Whitfield, "Book Review of Symbiosis in Cell Evolution", Biological Journal of Linnean Society, Vol. 77-79 1982, p. 18.
146 W. Ford Doolittle, "Uprooting the Tree of Life," *Scientific American*, 282:90, February 2000.
https://www.harunyahya.info/en/articles/endosymbiosis-theory-the