

Darwin, *The Variation of Animals and Plants under Domestication*, Introduction

In scientific investigations it is **permitted to invent any hypothesis**, and if it **explains various large and independent classes of facts** it rises to the rank of a **well-grounded theory**.

The principle of natural selection may be looked at as a mere hypothesis, but rendered in some degree probable by what we positively know of the **variability** of organic beings in a state of nature,-by what we positively know of the **struggle for existence**, and the consequent almost **inevitable preservation of favourable variations**,-and from the **analogical formation of domestic races**.

The principle of natural selection may be looked at as a mere hypothesis ... Now this hypothesis may be **tested** ... by trying **whether it explains several large and independent classes of facts**; such as the **geological succession** of organic beings, their **distribution** in past and present times, and their **mutual affinities and homologies**. If the principle of natural selection does explain these and other large bodies of facts, it ought to be received. **On the ordinary view of each species having been independently created, we gain no scientific explanation of any one of these facts**. We can only say that it has **so pleased the Creator** to command that the past and present inhabitants of the world should **appear in a certain order and in certain areas**; that He has impressed on them the most extraordinary **resemblances**, and has classed them in **groups subordinate to groups**. But by such statements **we gain no new knowledge; we do not connect together facts and laws; we explain nothing**.

Απολιθώματα Ν. Αμερικής

To exhume with one's own hands the bones of extinct and gigantic quadrupeds brings the whole question of the succession of species vividly before one's mind; and I found in South America great pieces of tessellated armour **exactly like**, but on a magnificent scale, that covering the pigmy armadillo; I had found great teeth **like those** of the living sloth, and bones **like those** of the cavy.

Είδη των Γκαλαπάγκος

When I visited during the voyage of H.M.S. *Beagle*, the Galapagos Archipelago, situated in the Pacific Ocean about 500 miles from South America, I found myself surrounded by **peculiar species of birds, reptiles, and plants, existing nowhere else in the world**.

-> μοιάζουν με είδη Ν. Αμερικής

Yet they nearly all bore an **American stamp**. In the song of the mocking-thrush, in the harsh cry of the carrion-hawk, in the great candlestick-like opuntias, **I clearly perceived the neighbourhood of America**, though the islands were **separated** by so many miles of ocean from the mainland, and **differed** much in their **geological constitution and climate**.

-> διαφέρουν από νησί σε νησί -> τα νησιά σχετικά πρόσφατα

Still more surprising was the fact that most of the inhabitants of each separate island in this small archipelago were **specifically different**, though most closely **related to each other**. The archipelago, with its innumerable craters and bare streams of lava, appeared to be of **recent origin**; and this I fancied myself brought near to the very act of creation.

-> εξέλιξη η πιο απλή εξήγηση

I often asked myself how these many peculiar animals and plants had been produced: the **simplest answer seemed to be that the inhabitants of the several islands had descended from each other**, undergoing **modification** in the course of their descent; and that all the inhabitants of the archipelago were **descended from those of the nearest land, namely America**, whence colonists word naturally have been derived.

These facts have as yet received no explanation on the theory of independent Creation; they cannot be grouped together under one point of view, but each has to be considered as an ultimate fact.

-> φυσική επιλογή ως αίτιο της εξέλιξης

But it long remained to me an inexplicable problem how the necessary degree of modification could have been effected, and it would have thus remained for ever, had I not **studied domestic productions, and thus acquired a just idea of the power of Selection**.

-> εξήγηση ομολογιών

How **inexplicable** is the similar pattern of the hand of a man, the foot of a dog, the wing of a bat, the flipper of a seal, on the doctrine of independent acts of creation! how **simply explained** on the principle of the natural selection of successive slight variations in the diverging descendants from a single progenitor!