

Modern Synthesis of Evolution

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Modern Evolution

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 A union of ideas from several [biological](#) specialties which provides a widely accepted account of [evolution](#) is known as modern synthesis of evolution.

Other names of modern synthesis

- millennium synthesis
- the neo Darwinian synthesis
- new synthesis
- the modern synthesis
- the evolutionary synthesis

This synthesis includes evidence from biologists, trained in genetics, who studied populations in the field and in the laboratory.

The modern synthesis summary

1. Genetic mechanisms and the observational evidence of naturalists help to explain the evolutionary phenomena.
2. Evolution is gradual genetic change.
3. [Natural selection](#) is by far the main mechanism of change;
4. The role of [genetic drift](#) is equivocal.
5. The [genetic diversity](#) existing in natural populations is a key factor in evolution.

Developments

The life on earth was evolved on earth in the late 1700 [Charles Darwin](#), explained the mechanism of evolution by Natural selection. Darwin's theory of natural selection helped to understand that life has in past one hundred and thirty years ago "the [Origin of Species](#) by Means of [Natural selection](#)" by Darwin summarized all of the evidence in favor of the idea that all organisms evidence he also added natural selection as a mechanism of evolution. It is the best theory of evolution "[Survival of the fittest](#)" is promoted worldwide.

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Population

Genetics

Population Genetics & Developmental Genetics

During that period [population genetics](#) were very important scientist researched on these topics. This led to the Neo-Darwinian theory of evolution which played a vital role in [Mutation](#) and variation within a population. Natural selection then altered frequency of genes in a population it replaced Darwinian Theory and the contemporary ideas on evolution is termed as current ideas on evolution are usually referred to as the Modern Synthesis.

He said that Darwin was not aware of genes and genetic drift. The modern theory of the mechanism of evolution differs from [Darwinism](#) in three important respects.

It understands the mechanisms of evolution through natural selection and one of the main causes is genetic drift. IT has inherited characters named genes. Variation within the particular population is due to presence of alleles. Speciation is due to the small genetic changes is equivalent to Macro and Micro evolution.

Modern synthesis understands the genes, "[Phenotype](#)" and population and Darwinism explains about only the speciation. This led to the confusion between evolutionists. There are many controversies leading to this and the evidence is the [Fossil](#) record .This explains how evolutionary models and it mechanism very clearly. Some of the evolutionist believes in Modern synthesis while some believe in Neo Darwinism.

What is the difference between Evolution and modern synthesis of evolution

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Reference Links

- <http://en.wikipedia.org/wiki/Evolution>
- <http://en.wikipedia.org/wiki/Adaptation>
- http://en.wikipedia.org/wiki/Genetic_drift
- http://en.wikipedia.org/wiki/Evidence_of_common_descent
- http://en.wikipedia.org/wiki/Modern_evolutionary_synthesis
- <http://www.youtube.com/watch?v=L3LpNfa7yWk>

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