§Dialectics

Dialectics is the method of reasoning which aims to understand things concretely in all their movement, change and interconnection, with their opposite and contradictory sides, as opposed to the formal, metaphysical mode of thought of ordinary understanding which begins with a fixed definition of a thing according to its various attributes: 'a fish is something with no legs which lives in the water'.

Darwin however, considered fish dialectically: some of the animals living in the water were not fish, and some of the fish had legs, but it was the **genesis** of all the animals as part of a whole interconnected process which explained the nature of a fish: they *came from* something and are *evolving into* something else.

Darwin went behind the *appearance* of fish to get to their essence. For ordinary understanding there is no difference between the appearance of a thing and its essence, but for dialectics the form and content of something can be quite contradictory — parliamentary democracy being the prime example: democracy in form, but dictatorship in content!

And for dialectics, things can be contradictory not just in appearance, but in *essence*. For formal thinking, light must be either a wave *or* a particle; but the truth turned out to be dialectical — light is both wave *and* particle.

We are aware of countless ways of understanding the world; each of which makes the claim to be *the* absolute truth, which leads us to think that, after all, "It's all relative!" For dialectics the truth is the *whole picture*, of which each view makes up more or less one-sided, partial aspects.

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Dialectics has its origins in ancient society, both among the Chinese and the Greeks, where thinkers sought to understand Nature as a whole, and saw that everything is fluid, constantly changing, coming into being and passing away. It was only when the piecemeal method of observing Nature in bits and pieces, practiced in Western thinking in the 17th and 18th century, had accumulated enough positive knowledge for the interconnections, the transitions, the genesis of things to become comprehensible, that conditions became ripe for modern dialectics to make its appearance. It was Hegel who was able to sum up this picture of universal interconnection and mutability of things in a system of *Logic* which is the foundation of what we today call Dialectics.

As Engels put it:

"the whole world, natural, historical, intellectual, is represented as a process — i.e., as in constant motion, change, transformation, development; and the attempt is made

to trace out the internal connection that makes a continuous whole of all this movement and development." [Socialism: Utopian & Scientific]

Source: http://www.marxists.org/reference/archive/hegel/help/glossary.htm

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Here is a more detailed quote from Ch. 2 of Engels' Socialism: Utopian & Scientific:

"When we consider and reflect upon Nature at large, or the history of mankind, or our own intellectual activity, at first we see the picture of an endless entanglement of relations and reactions, permutations and combinations, in which nothing remains what, where and as it was, but everything moves, changes, comes into being and passes away. We see, therefore, at first the picture as a whole, with its individual parts still more or less kept in the background; we observe the movements, transitions, connections, rather than the things that move, combine, and are connected. This primitive, naive but intrinsically correct conception of the world is that of ancient Greek philosophy, and was first clearly formulated by Heraclitus: everything is and is not, for everything is fluid, is constantly changing, constantly coming into being and passing away.

But this conception, correctly as it expresses the general character of the picture of appearances as a whole, does not suffice to explain the details of which this picture is made up, and so long as we do not understand these, we have not a clear idea of the whole picture. In order to understand these details, we must detach them from their natural, special causes, effects, etc. This is, primarily, the task of natural science and historical research ... A certain amount of natural and historical material must be collected before there can be any critical analysis, comparison, and arrangement in classes, orders, and species. The foundations of the exact natural sciences were, therefore, first worked out by the Greeks ... and later on, in the Middle Ages, by the Arabs. Real natural science dates from the second half of the 15th century, and thence onward it had advanced with constantly increasing rapidity. The analysis of Nature into its individual parts, the grouping of the different natural processes and objects in definite classes, the study of the internal anatomy of organized bodies in their manifold forms — these were the fundamental conditions of the gigantic strides in our knowledge of Nature that have been made during the last 400 years. But this method of work has also left us as legacy the habit of observing natural objects and processes in isolation, apart from their connection with the vast whole; of observing them in repose, not in motion; as constraints, not as essentially variables; in their death, not in their life."

Engels describes this metaphysical perspective as being categorical and absolute: "a thing either exists or does not exist; a thing cannot at the same time be itself and

something else. Positive and negative absolutely exclude one another; cause and effect stand in a rigid antithesis, one to the other."

"This "metaphysical mode of thought, justifiable and necessary as it is in a number of domains ... sooner or later reaches a limit, beyond which it becomes one-sided, restricted, abstract, lost in insoluble contradictions. In the contemplation of individual things, it forgets the connection between them; in the contemplation of their existence, it forgets the beginning and end of that existence; of their repose, it forgets their motion. It cannot see the woods for the trees.

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For everyday purposes, we know and can say, e.g., whether an animal is alive or not. But, upon closer inquiry, we find that this is, in many cases, a very complex question, as the jurists know very well. They have cudgelled their brains in vain to discover a rational limit beyond which the killing of the child in its mother's womb is murder. It is just as impossible to determine absolutely the moment of death, for physiology proves that death is not an instantaneous, momentary phenomenon, but a very protracted process.

In like manner, every organized being is every moment the same and not the same; every moment, it assimilates matter supplied from without, and gets rid of other matter; every moment, some cells of its body die and others build themselves anew; in a longer or shorter time, the matter of its body is completely renewed, and is replaced by other molecules of matter, so that every organized being is always itself, and yet something other than itself.

Further, we find upon closer investigation that **the two poles of an antithesis**, **positive and negative, e.g., are as inseparable as they are opposed, and that despite all their opposition, they mutually interpenetrate**. And we find, in like manner, that cause and effect are conceptions which only hold good in their application to individual cases; but as soon as we consider the individual cases in their general connection with the universe as a whole, they run into each other, and they become confounded when we contemplate that universal action and reaction in which causes and effects are eternally changing places, so that what is effect here and now will be cause there and then, and vice versa.

... Dialectics ... comprehends things ... in their essential connection, ...motion, origin and ending. ... Nature is the proof of dialectics, and it must be said for modern science that it has furnished this proof with very rich materials increasingly daily, and thus has shown that, in the last resort, Nature works dialectically and not metaphysically; that she does not move in the eternal oneness of a perpetually recurring circle, but goes through a real historical evolution. In this connection, Darwin must be named before all others. He dealt the metaphysical conception of Nature the heaviest blow by his proof that all organic beings, plants, animals, and man himself, are the products of a process of evolution going on through millions of years. ...

Dialectics looks at the world as a process and claims that everything is in constant motion, change, transformation, development. It attempts to understand the "internal connection that makes a continuous whole of all this movement and development. From this point of view, the history of mankind no longer appeared as a wild whirl of senseless deeds of violence, all equally condemnable at the judgment seat of mature philosophic reason and which are best forgotten as quickly as possible, but as the process of evolution of man himself. It was now the task of the intellect to follow the gradual march of this process through all its devious ways, and to trace out the inner law running through all its apparently accidental phenomena."

Source: http://www.marxists.org/archive/marx/works/1880/soc-utop/ch02.htm#010