

Scientific/Enlightenment view of nature vs. the Romantic view

Newton's Laws of Motion

I. Every object in a state of uniform motion tends to remain in that state of motion unless an external force is applied to it.

II. The relationship between an object's mass m , its acceleration a , and the applied force F is $F = ma$.

III. For every action there is an equal and opposite reaction.

A summary of what's found in Newton's *Philosophiæ naturalis principia mathematica* (1687)

William Blake on the Newtonian view of the Universe

I turn my eyes to the Schools & Universities of Europe
And there behold the Loom of Locke whose Woof rages dire
Washed by the Water-wheels of Newton. black the cloth
In heavy wreathes folds over every Nation; cruel Works
Of many Wheels I view, wheel without wheel, with cogs tyrannic
Moving by compulsion each other: not as those in Eden: which
Wheel within Wheel in freedom revolve in harmony & peace. (15.14–20, E159)

Jerusalem (1804-1820)

Scientific/Enlightenment view

Associated with Descartes, Kant, Hume, Newton

1. Universe as inert (passive). “Stuff” exists to be pushed around by external forces. It does not act spontaneously. Atomistic and/or mechanistic view (clockwork universe)

2. Mind as inert (sensations “dropped into the letterbox of the senses”)

3. Universe *reduced* to shape, size and matter (primary properties). Secondary properties (colour, smell etc) are viewed as *less real* effects of primary properties

4. Reason emphasised over emotion. Reasoning is extended to all spheres of knowledge. To “know” nature means to have a rational understanding of its mechanisms.

5. Determinism (following from the causal laws found in science).

Romantic view

Associated with Blake, Coleridge and Wordsworth

1. Humans as the originators of actions (free will)
2. Mind is active. We bring things to experience. We are not “neutral” observers, but are participants instead.
3. Self realisation – Humans are not just collections of particles but are beings that are developing over time.
4. Nature is not passive and inert, but is *alive*.
5. Feelings are given authority. To know nature may be to experience it *emotionally* and *aesthetically*.
6. Mystical experiences regarded as valid.

Deep Ecology can perhaps be seen as a revival of the Romantic view