

Otto Neurath

Logical Positivism, the Unity of Science Movement and ISOTYPE

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Otto Neurath was an economist and philosopher born in Vienna in 1882 and died in England in 1945 after fleeing Nazi persecution. As a Marxist he came under the suspicion of the occupying German forces in Austria and was arrested for treason but was eventually released after it was determined he wasn't political. Among his many achievements is the development of ISOTYPE, a visual language that has been extremely influential in cartography and graphic design. He had three wives, the last of which made an exerted effort to continue and preserve his work. Marie Neurath insured the survival of her late husbands writings by donating them to the University of Reading and expanded on his ISOTYPE language system in a number of children's books. Neurath was a member of the philosophical group known as the Vienna circle and was the primary author of its manifesto. Members of the circle were known as logical positivists. Though it is widely understood that logical positivism ended as a dynamic philosophical movement in the first half of the twentieth century; it can also be seen as a vital part of the evolution of analytic philosophy and a more general positivism that dominates virtually every academic discipline today.

Logical positivism was a uniquely structured philosophical movement. It had members and a set of guidelines set down in a manifesto. Given this, it's hard to imagine that such a cohesive movement could survive as new theories were introduced and people moved on. The basic idea behind logical positivism, often called logical empiricism, is that information about the world must be gathered through evidence and logical tautologies. Neurath wrote that he and his colleagues were seeking to "create a climate which will be free from metaphysics in order to promote scientific studies in all fields by means of logical analysis."¹ His concern was that some disciplines were held to a lower

standard of verification than others. Some, such as metaphysics, aesthetics and ethics had no rational foundation at all. Approaching all intellectual pursuits with the same analytical methods used in hard science was one goal of the Vienna circle. This is the unity of science movement that was primarily promoted by Neurath.

Admirably striving for complete objectivity, Neurath developed system of non-verbal communication called ISOTYPE with the German artist Gerd Arntz. Today this system has been expanded upon tremendously and is used universally throughout all aspects of human life. Neurath and Arntz's ISOTYPE language developed into what is now referred to as pictograms. Though originally geared toward children and pre-teen education the system was quickly adopted throughout the world for its obvious practical uses. As objective as logical positivists tried to be they have fallen under criticism for a number of reasons including failing to live up to the expectations they placed on others.

If the logical positivists declared metaphysics and value judgments to be nonsense what has been the reaction from a world that took them for granted? In his 1950 book, *A Critique of Logical Positivism*, C. E. M. Joad summed up the traditional objections. "If you destroy the grounds for believing in an objective order of value, you will hold that those who have, in fact, believed in it, have been mistaken and that their beliefs have been irrational."² He goes on to state that "logical positivism is unfavorable to religious beliefs"³ and that it may promote undesirable beliefs and discourage desirable ones. Like all critics of positivism Joad fails to provide a rational or objective basis for his arguments. His "desirable" and "undesirable" beliefs transparently reflect the cultural clichés and biases of his culture. As time went on more philosophers of metaphysics and aesthetics began to accept positivism and incorporate it into their disciples. Unproven

assertions and vague language have all but disappeared from serious discourse. Some contemporary Muslim scholars like Seyyed Hossein Nasr welcome positivism and realize they must incorporate it into their metaphysics. “Nasr...privileges intuition...without completely dismissing reason or rational thought, though he does subordinate the latter to the former.”⁴ Nasr believes Islam is in a unique position to respond to positivism because many of its thinkers accept that metaphysics has to face the same burden of proof as any other truth claims. Other reactions to positivism have been nonoverlapping magisteria, the idea that science and religion can’t comment on one another, and postmodern relativism. Basically the argument for the continuation of metaphysics, and more specifically religion, as a living discipline is to argue that unverifiable “revealed truth” is as reliable as objective evidence.

In aesthetics, philosophers George Dickie and Arthur Danto have developed the institutional theory that claims that an object becomes a work of art when it is accepted as such by the “Artworld.” The value of art can derived from market forces and quality can be seen in relationship to similar work. There is no need for language that Otto Neurath would call nonsense. Certainly many artists embrace meaningless or vague words in their artist statements and people might develop an emotional attachment to a work of art but the production and selling of artwork continues, objectively, unabated.

1. Otto Neurath, "Sociology and Physicalism," in *Logical Positivism*, ed. A. J. Ayer (Toronto and Ontario: The Free Press, 1959), 282.
2. C.E.M. Joad, *A Critique of Logical Positivism* (Chicago: The University of Chicago Press, 1950), 144.
3. Ibid. 146.
4. Charles E. Butterworth, "Revelation Over Rationalism: The Thought of Seyyed Hossein Nasr, in *The Library of Living Philosophers*, ed. Lewis Edwin Hahn, Randall E. Auxier and Lucian W. Stone (Chicago and La Salle: Open Court, 2001), 101.