The Beauty of Anthroposophy, or: What's Scientific about Spiritual Science?

Frederick Amrine

Summary

According to 20th century philosophy of science, the interplay of intelligibility, discovery and justification is what designates a scientific approach. Intelligibility, in that science renders phenomena meaningful. Discovery as the moment of insight that ultimately yields a hypothesis, which can be corroborated or falsified by proper experimental testing. In this essay, the problems of this model of science are addressed and three additional concepts are brought into discussion to characterize science: sublimity, beauty and elegance. The meaning and application of these terms in the history of science are illustrated by examples. Beauty and sublimity can also be experienced in the ideas of Steiner's spiritual science. The plea for the criteria of science suggested here is a plea for the scientific approach of anthroposophy as well.

Zusammenfassung

Die klassischen Begriffe, mit deren Zusammenspiel die Wissenschaftstheorie des 20. Jahrhunderts ihren Gegenstand gekennzeichnet hat, sind Verstehen, Entdeckung und Rechtfertigung. Wissenschaft verleiht den Phänomenen eine verständliche Bedeutung. Die Entdeckung ist der Moment der Einsicht, der schlussendlich zu einer Hypothese führt, die durch einen experimentellen Test bestätigt oder falsifiziert werden kann. Dieser Essay weist auf die Probleme dieses Wissenschaftsmodells hin und bringt als Kriterien für Wissenschaftlichkeit drei andere Konzepte in die Diskussion: Erhabenheit, Schönheit und Eleganz. Die Bedeutung und Anwendung dieser Begriffe in der Wissenschaftsgeschichte wird an Beispielen veranschaulicht. Schönheit und Erhabenheit können auch an Ideen der Geisteswissenschaft Rudolf Steiners erlebt werden. Ein Plädoyer für die hier vorgeschlagenen Kriterien für Wissenschaftlichkeit ist gleichzeitig ein Plädoyer für die Wissenschaftlichkeit der Anthroposophie.

Science involves the interplay of intelligibility, discovery, and justification. Intelligibility runs the gamut from prediction to the apprehension of cosmic wisdom; science renders phenomena meaningful. Discovery is the moment of insight, eventually yielding a testable hypothesis. Justification is an odd word: originally it was a theological term (as for example in Pauline "justification through faith"). But it is the proper term for the testing of a scientific hypothesis.

Now this prevailing model is beset with difficulties. For example, there is no method for discovery; it is treated as extra-scientific. Science is viewed as beginning with the testing of a hypothesis; as the great biologist Peter

Medawar put it, hypothesis formation is a "logically unscripted" moment. Another related problem is the reduction of intelligibility to rational reconstruction (what *David Bohm* (1971, pp. 51–68) calls "axiomatization"): we want to reduce our intuitions too quickly to mathematical axioms, and indeed have come to see the axioms as primary, whereas they are properly derivative from insight. This leads to the hypertrophy of justification (David Bohm again) at the expense of intelligibility. Moreover, as *Thomas Kuhn* (1962) has demonstrated so brilliantly, scientific practice does not conform to the methodological stereotype of falsification. "Normal science" tries furiously to explain everything in light of the prevailing paradigm, even though it is only falsification that yields scientifically valid (if negative) insights. There have been notable failures of replication, especially recently: in one egregious case, researchers at the University of Virginia were able to replicate only 39 out of 100 central experiments in the field of psychology. And truth as "conformity to appearances" has been undermined by the psychology of perception: there is no "neutral observation language," as for example in Jerome Bruner's discovery of "perceptual readiness"; we see what habit accustoms us to seeing, rather than what's actually there.

Much more could be adduced here, but this much already makes clear that something different is needed. So let's expand the discussion by bringing in three additional concepts: sublimity, beauty, and elegance.

Sublimity is not a standard scientific category; I propose it as such. Archetypally sublime experiences have been the Alps, a storm at sea, and, in Kant, the mathematical concept of the infinite. The sublime awakens wonder in the cognitive sense, and awe in the aesthetic and moral senses. Hence the famous quote from the end of Kant's "Critique of Pure Reason" (1781): "Two things fill the soul with ever-renewed and ever-growing admiration, the more frequently and constantly reflection applies itself to them: the starry sky above me and the moral law within." Buckminster Fuller saw Einstein's Theory of Relativity as "the metaphysical mastering the physical," which again would be a manifestation of the sublime. The sublime is not a standard scientific concept, but it should be.

Beauty, however, is very much a standard scientific category! Beauty is about harmony in all its guises, and especially about the harmony between parts and wholes. Hence Kant approached aesthetic and biological forms with the same concepts in his "Critique of Judgment" or "Third Critique" of 1790, and inspired Schiller's essay on Aesthetic Education (1794), which inspired Steiner in turn. Kant, Schiller, and Steiner view beauty as a direct manifestation of ideas. Beauty hovers between sublimity and elegance: you feel awe at seeing hitherto unapprehended connections (tending to the sublime), and you sense unity captured within multiplicity (tending towards elegance).