

RENAISSANCE EPISTEMOLOGY: THE PROGRESS TO MIMETICS

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Abstract

This study delved into the conflicting views and interpretations of the history of epistemology. In spite of the seemingly contradictory positions, a clear trend can be discerned. The trend moves from a static, passive view of knowledge towards a more adaptive and active one. Mimetics is the field that shows how information units influence and form human beings and impact the social systems to which they belong. Memes, which include semiotic signs out there in the world and objects in the minds spread among human beings. In an ever closely connected and interdependent world, where parts in nature and society increasingly influence each other. It is legitimate to argue that, meme basic unit of reality, ground even the epistemology. This work adopts hermeneutics methods to expound on the thesis of Renaissance Epistemology.

Keywords: Renaissance, Epistemology, Mimetics, Semiotic, Signs

Introduction

Epistemology is the branch of philosophy that studies knowledge. Porter, (1913) sees it as the discipline that is concerned with the theory of knowledge. It attempts to answer the basic question: what distinguishes true (adequate) knowledge from false (inadequate) knowledge? Practically, this questions translates into issues of scientific methodology: how can one develop theories or models that are better than competing theories? It also forms one of the pillars of the new sciences of cognition, which developed from the information processing approach to psychology, and from artificial intelligence, as an attempt to develop computer programs that mimic a human's capacity to use knowledge in an intelligent way. Much of the debate in epistemology centers on four areas: (1) the philosophical analysis of the nature of knowledge and how it relates to such concepts as truth, belief, and justification (Steup and Zaltar, 2024). (2) various problem of skepticism, (3) the source and scope of knowledge and justification belief, and (4) the criteria for knowledge and justification.

When one look at the history of epistemology, we can discern a clear trend, in spite of the confusion of many seemingly contradictory positions. The first theories of knowledge stressed its absolute, permanent character, whereas the later theories put the emphasis on its relativity or situation-dependence, its continuous development or evolution, and its active interference with the world and its subject and objects. The whole trend move from a static, passive view of knowledge towards a more and more adoptive and active one.

The implementation of empiricism in newly developed experimental sciences led to a view of knowledge which is still explicitly or implicitly held by many people nowadays: the reflection-correspondence theory. According to the view knowledge results from a kind of mapping a reflection of external object, through the sensory organs, possibly aided by different observation instruments, to the brain or mind. Through knowledge has no a priori existence, like in Plato's conception, but has to be develop be observation, it is still absolute, in the sense that any piece of proposed knowledge is supposed to either truly correspond to a part of external reality, or not. In that view, one may in practice never reach complete or absolute knowledge, but such knowledge is somehow conceivable as a limit of ever more precise reflection of reality.

A most recent, and perhaps most radical approach, extends this evolutionary view in order to make knowledge actively pursue goals of its own. This approach, which as yet has not had the time to develop a proper epistemology, may be called memetics. It notes that knowledge can be transmitted from one subject to another, and thereby loses its dependence on any single individual. A piece of knowledge that can be transmitted or replicated in such a way is called a 'meme'. The death of an individual carrying a certain meme now no longer implies the elimination of that piece of knowledge, as evolutionary epistemology would assume. As long as a meme spreads more quickly to new carriers, than that its carriers die, the meme will proliferate, even though the knowledge it induces in any individual carrier may be wholly inadequate and even dangerous to survival. In this view a piece of knowledge may be successful (in the sense that it is common of has many carriers) even though its prediction may be totally wrong, as long as it is sufficiently 'convincing' to new carriers. Here we see a picture where even the subject of knowledge has lost his primacy, and knowledge becomes a force of its own with proper goals and ways of developing itself. That this is realistic can be illustrated by the many superstitions, fads, and irrational beliefs that have spread over the globe, sometimes with a fighting speed.

Like social constructivism, memetics attracts the attention to communication and social processes in the development of knowledge, but instead of seeing knowledge as constructed by the social system, it rather sees social systems as constructed by knowledge processes. Indeed, a social group can be defined by the fact that its members share the same meme (Heylighen & Chielens 2009). Even the concept of 'self', that which distinguishes a person as a individual, can be considered as a piece of knowledge, constructed through social processes, and hence a result of memetic evolution. From a constructivist approach, where knowledge is constructed by individuals or society, we have moved to a memetic approach, which sees society and even individuality as byproducts constructed by an ongoing evolution of independent fragments of knowledge competing for domination.

What is a Meme?

The term “meme” derives from the Ancient Greek *mimetes*, meaning “imitator”, pretender”. The similar term “mneme” was used in 1904, by the German evolutionary biologist Richard Semon, best known for his development of the engram theory of memory, on his work *Die mnemischen Empfindungen in ihren Beziehungen zu den Originalemfindungen*, translated into English in 1921 as *The Mneme*. Richard Dawkins (1976) apparently coined the word “meme” independently of Simon, writing this:

Mimeme comes from a suitable Greek root, but I want a monosyllable that sounds a bit like gene. I hope my classicist friends will forgive me if I abbreviate mimeme to meme. If it is any consolation, it could alternatively be thought of as being related to “memory”, or to the French word meme.

Memes as signs and/or objects in themselves do not have consciousness, intention or capabilities, but from the outside it makes sense to talk about competition among them. It is possible to talk about the diffusion, selection and adaptation of memes without implying that memes have human capabilities. According to a memetic approach, each one of us host thousands of memes. Consistent with Memetics, the kind of meme we carry is a function of the cultural system we belong or relate to.

The meme, analogous to a gene, was conceived as a “unit” of cultural” (an idea, belief, pattern of behavior, etc.) which is “hosted” in the minds of one or more individual, and which can

reproduce itself, thereby jumping from mind to mind. Thus what would otherwise be regarded as one individual influencing another to adopt a belief is seen as an idea-replication reproducing itself in a new host. As with genetics, particularly under a Dawkinsian interpretation, a meme's success may be due to its contribution to the effectiveness of its host.

The Field of Memetics

Memetics is the theory of mental content based on an analogy with Darwinian evolution, originated from the popularization of Richard Dawkins 1976 book, *The Selfish Gene* (Burnman, 20212). Proponents describe memetics as the study of how memes spread to social systems and how they impact us as individual agents. Memes are sustainable information influencing and forming us, impacting the social system we belong to. Sustainable Memes spread successfully among us, and can be regarded both as semiotic signs out there in the world, and objects in our minds. Memes are naturally selected and adopted by human beings based on “competition” within our consciousness. The fittest and best-adapted memes will have a better diffusion than ones which do not fit into the cultural system they are competing within. Kantorovich, (2013) sees memetics as notable for sidestepping the traditional concern with the truth of ideas and beliefs. Instead, it is interested in their success.

In his book *The selfish Gene* (1976), the evolutionary biologist Richard Dawkins used the term meme to describe a unite of human cultural transmission analogous to the gene, Ted Claok had briefly outlined a similar hypothesis in 1975, which Dawkins referenced. Cultural evolution itself is a much older topic, with a history that dates back to Darwin's era

Dawkins (1976) contended that the meme is a unit of information residing in the brain and is the mutating replicator in human cultural evolution. It is a pattern that can influence its surroundings-that is , it has causal agency, and can propagate. This created great debate among sociologists , biologists, and scientists of other disciplines, because Dawkins himself did not provide a sufficient explanation of how the replication of units of information in the brain control human behaviour and ultimately culture, since the principal topic of the book was genetics. Dawkins apparently did not intend to present a comprehensive theory of memetics in the selfish gene, but rather coined the term meme in a speculative spirit. Accordingly, the term unit of information came to be define in different ways by many scientists.

The modern memetics movement dates from the mid 1980s. Memeticist was coined an analogous to geneticist originally in the selfish Gene. Later Arel Lucas suggested that the discipline that studies memes and their connections to human and another carrier of them be know as memetics by analogy with genetics. Dawkins' *The selfish Gene* has been a factor in drawing in people of disparate intellectual backgrounds. Another stimulus was the publication in 1991 of *Consciousness explained* by Tufts University philosopher Daniel Dennett, which incorporated the meme concept into a theory of the mind. In his 1991 essay *Viruses of the Mind*", Rchard Dawkins used memetics to explain the phenomenon of religious belief and the various characteristics of organized religions. By then, memetics had also become a theme appearing in fiction. The ideal of language as a virus had already been introduced by William S. Burroughs as early as 1962 in his book *the Ticket that exploded*, and later in the electronic revolution, published in 1970 in *The job* and is also explored in *Media Virus* by Douglas Rushkoff in 1995.

However, the foundation of memetics in full modern incarnation originates in the publication in 1996 of two books by author outside the academic mainstream: *Virus of the mind: The New Science of the meme* by former Microsoft executive turned motivational speaker and professional poker player, Richard Brodie, and *thought contagion: how belief spreads through*

society by Aaron Lynch, a mathematician and philosopher who worked for many years as an engineer at Fermilab. Lynch claimed to have conceived his theory totally independently of any contact with academics in the cultivated evolutionary sphere, and apparently was not even aware of Dawkins's *The Selfish Gene* until his book was very close to publication.

Conclusion

Vada (2015) states that every science has its own ontology, epistemology and consequently its own methodologies. Ontology defines the fundamental categories of reality. Domain ontology as distinct from formal ontology is related to focus of study. Each research field has its own ontology. A biologist, who studies ants, differentiates the ant-specific constituent parts, actions and contexts. Similarly, a sociologist will have implicit and/or explicit presuppositions about categories of reality that are fundamental and related in the human and social systems she/he studies. Where formal ontology says something specific about different areas of reality. Epistemology defines how we can know and reason about that reality. As for domain ontology, each research field has its own epistemology: the maps applied in the sociology in his/her studies of interacting humans.

In an ever closer connected and interdependent World, where parts in nature and society increasingly influence each other, it is legitimate to ask for an aggregate cross-scientific methodology that can be applied both on human thoughts, communication, decision, action and interaction, and hence become a new overall epistemology. Despite the traditional division, it should be possible to say something general about our fundamental categories of reality crossing the different sciences. Is there an overall cross-scientific way to reason and make sense of and broaden our perspective of what determines human action and interaction? Is there a best technique for inquiry that integrates the traditional division, but still discovers and examines facts without going into the over-generalization trap?

Vada (2015) maintains that through history there has been an evolution in ontology, epistemology and methodology. Francis Bacon made his crucial experiments in nature science, and Max Weber made his methodological division between interpretation, understanding and explanation in social science. John Locke's and David Hume's Empiricism, Auguste Comte's Positivism and the Pragmatism of Charles Peirce, George Herbert Mead and John Dewey are contributions among many others of different approaches to the philosophy of science.

A scientific approach presupposing that facts are out there, just waiting to be discovered, are very often combined with another presupposition; that we can perceive the world as neutral signs and interpret the sign in relation to these facts ourselves, we are placed in the solid scientific tradition that founded modernity and developed positivism. If one combines this later postpositivistic work with contributions from pragmatism, we can go further: Peirce's famous formulation summarizes an essence in the philosophy: A sign is anything that stands for something in somebody's mind. This "something" is called the sign's object; the "somebody" is called its interpretant.

Reality can be divided into several parts not only by domain, but also as we perceive it: The reality out there, present as sign; can be defined as "reality a". When "reality a" hits the interpreter's neurological receptors (See, hear, feel, smell, taste), it becomes parts and wholes of a "reality b". When the interpreter makes sense and becomes conscious of these parts and wholes of "reality b", it becomes "reality b", becomes "reality c". When "reality c" is given code as object in the interpreter's mind, it becomes "reality d", and finally when "reality d" is communicated as coded objects has become "reality e", when again can be "new reality" for new interpreters out

there. All individual perception can be regarded as partial; we will always lose parts of reality in our individual and collective journeys and loops in “reality a-e”.

Another complementary post-positivist way to approach perception, thought, communication and social action is Memetics is derived from natural science and genetics, and uses the same research programme studying social diffusion and adaptation of sign/or objects and actions. Memes are sustainable information units manifested as signs and/or objects (along reality a-e). Memes can be regarded from individual and collective systems and spread successfully within them. Memes are naturally selected and adapted by human beings based on competition or our consciousness. The fittest and best adapted memes will have a better diffusion than the ones who do not fit into the cultural system they are competing. According to a Memetics approach, each one of us hosts thousands of memes. “Beethoven no 5” and “Sex” are all some examples of memes out there. What kind of memes we carry is a function of the cultural system we are a part of. As mentioned above we sense and interpret these memes according to “reality a-e”

The Criticism

Polichak (2016) writes that critics contend that some proponents' assertions are “untested, unsupported or incorrect.” Benitez-Bribiesca (2001) a critic of memetics, calls it "a pseudoscientific dogma" and "a dangerous idea that poses a threat to the serious study of consciousness and cultural evolution" among other things. As factual criticism, he refers to the lack of a code script for Memes, as the DNA is for genes, and to the fact that the meme mutation mechanism (i.e., an idea going from one brain to another) is too unstable (low replication accuracy and high mutation rate), which would render the evolutionary process chaotic. This, however, has been demonstrated (e.g. by Daniel C. Dennett, in *Dangerous Idea*) to not be the case, in fact, due to the existence of self-regulating correction mechanisms (vaguely resembling those of gene transcription) enabled by the redundancy and other properties of most meme expression languages, which do stabilize information transfer. (E.g. spiritual narratives---including music and dance forms can survive in full detail across any number of generations even in cultures with oral tradition only.) Memes for which stable copying methods are available will inevitably get selected for survival more often than those which can only have unstable mutations, therefore going extinct.

Another criticism comes from semiotics, (e.g., Deacon, (2016) and Kull (2000) stating that the concept of meme is a primitivized concept of sign. Meme is thus described in memetics as a sign without its triadic nature. In other words, meme is a degenerate sign, which includes only its ability of being copied. Accordingly, in the broadcast sense, the object of copying are memes, whereas the objects of translation and interpretation are signs.

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