Keith Donnellan

Keith Donnellan (1931 –) began his studies at the University of Maryland, and earned his Bachelor's degree from Cornell University. He stayed on at Cornell, earning a Master's and a PhD in 1961. He also taught at there for several years before moving to UCLA in 1970, where he is currently Emeritus Professor of Philosophy.

Donnellan's work is mainly in the philosophy of language, with an emphasis on the connections between semantics and pragmatics. His most influential work was his 1966 paper "Reference and Definite Descriptions". In this paper, he challenges the canonical view, due to Bertrand Russell, about definite descriptions. Russell had argued that the proper semantic treatment of a definite description such as "the present king of France" was quantificational. Thus, a sentence like "the present king of France is bald" should be analyzed as "There exists one and only one entity x that is the present king of France, and x is bald". Donnellan argues that in natural languages, there are actually two different kinds of uses of definite descriptions. Russell's analysis picks out the "attributive" use of definite descriptions. When we use a definite description ("the F") this way, we mean to make statements about the unique entity x that is F. However, Donnellan notes that we also sometimes use definite descriptions "referentially" to pick out a given entity and say something about it. To see this, imagine you are at a party where virtually everyone is drinking beer. However, you and your friend are observing a man in a corner of the room holding a martini glass. Unbeknownst to you, the man's glass is filled with water. You turn to your friend and ask, "who is the man drinking a martini?" Suppose further that your friend knows that the man in question is Fred and that Fred's glass is filled with water. According to the Russellian attributive analysis, such a question would amount to asking for the identity of the one and only one man drinking a martini. But the presupposition that there is a man drinking a martini is false, and so there should be no answer to the question. But your friend can, and in normal circumstances will, answer your question. Thus, Donnellan argues, even though there is no unique thing that satisfies the definite description, there is nothing defective about the use of the phrase "the man drinking a martini". This referential use of the phrase enabled your friend to answer your question.

The position of Donnellan's described above provoked a long and lively debate about the distinction between semantics and pragmatics – i.e., where the theory of meaning leaves off and

the theory of how we use language in practical circumstances picks up. Much of Donnellan's later work was devoted to this broad issue, along with other issues concerning the foundations of language.

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Zelig Harris

Zellig Sabbettai Harris (1909 – 1992) was a linguist at the University of Pennsylvania for most of the twentieth century, where he was, among other things, the teacher of Noam Chomsky. Harris' large body of writings spans a diverse range of areas in linguistics – from books detailing various properties of obscure languages to books developing the mathematical aspects of his method of "distributional analysis". Perhaps his most noteworthy philosophical position was that, like Carnap and the members of the Vienna Circle, Harris was opposed to the semantic

theories of the time. But whereas Carnap and others opposed semantic theories on the grounds that intensional entities were too mysterious, Harris' opposition to the use of straightforwardly semantic notions in linguistic theory was driven by a kind of a priori methodological concern. Linguistics, Harris argued, was unlike any other science in that there is no "external" metalanguage in which a linguistic theory may be stated. In astronomy, for instance, the fundamental entities and relations of the theory may (at least in principle) be characterized without using the very astronomical phenomena in question. That is, a theory about black holes can explain how the term "black hole" is to be used without using either the phenomena themselves (black holes) or simply assuming a prior grasp of the relevant terms (e.g. "black hole"). Logically speaking, this would be done by using a "metalanguage", in which the terms of the theory of astronomy are themselves discussed. Thus, the astronomer can step outside of her theory and ground its crucial terms in other terms. Not so with language, Harris argues. Like any other scientific theory, a linguistic theory must explain its crucial terms in a metalanguage. But when a linguistic theory uses a metalanguage, it is using a language, and is therefore employing the very phenomena that constitute the object of study. Moreover, the theory is also assuming a prior understanding of the metalanguage and the terms it uses. Since the goal of a linguistic theory is to understand all natural languages, it will not do to theorize about one natural language using another natural language. Moreover, using an artificial language (such as a formal language of logic or arithmetic) will not do, either, since the terms and structural relations of an artificial language must be defined. Although these terms and relations might themselves be defined in yet a further artificial language (a "meta-metalanguage"), eventually the last of this finite hierarchy of metalanguages must itself be explained in a natural language metalanguage, thus returning us to the original epistemological problem.

Harris' own view about language was based on the distributional properties of phonemes. He argued at great length that these properties could form an adequate theoretical basis for linguistic notions. For instance, the notion of a sentence was defined as a string of phonemes, where the end of that string was a point every phoneme was equally likely to follow next in the discourse as any other. (This can be contrasted with, e.g., the word *bake*, which is far more likely to be followed by the phonemes corresponding to *–ed* or *–ing* than by those corresponding to *cat*.

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Jerrold Katz

Jerrold J. Katz (1932 – 2002) was educated at the George Washington University (BA) and Princeton (PhD). His professional career was spent at MIT (1963 – 1975) and the CUNY Graduate Center (1975 – 2002). Although his work covered a great many areas of philosophy, he is primarily known as a philosopher of language.

Katz's philosophical views changed dramatically over time, so that it is useful to think of his work as having two main periods. In his early work, Katz focused on the foundations of linguistics, particularly semantics. In this stage of his career, Katz strongly was a strong supporter of many Chomskyan views about language and linguistics, at a time when these views were being hotly debated. In particular, Katz endorsed the view that a linguistic theory is primarily a theory about the minds of speakers of the language. Katz's most significant

contribution in this period was his theory of "semantic markers". According to this theory, the meaning of a word or expression is given by the connections it has to other words and expressions. For example, the meaning of "chair" was analyzed as being composed of the concepts: Object, Physical, Non-living, Artifact, Furniture, Portable, Something with legs, Something with a back, Something with a seat, Seat for one (1972, 40). These other expressions (e.g., Object) were in turn defined by their connections to yet other expressions. Although widely influential, the theory of semantic markers was subjected to severe criticism by many philosophers of language for failing to connect the meaning of a word or expression with its truth conditions. Recently, however, the theory has experienced something of a revival. It is viewed by some as an important precursor to statistically based theories of concepts and cognition (such as stereotype and prototype theories of concepts).

Katz's other philosophical period centered around a radical rejection of some central claims of his earlier period. In particular, Katz eschewed the mentalistic claims about linguistics. In its place, he developed a view according to which the subject matter of linguistics is a kind of abstract object, much as the subject matter of mathematics (e.g., numbers, sets, etc.) is a systematic collection of abstract objects. Thus, the job of linguistics is not primarily to construct a high-level psychological theory regarding human linguistic abilities; its primary task is rather to describe a certain kind of abstract entity, language. As part of the development of this view, Katz defends a general Platonistic metaphysics – according to which such things as numbers, proposition, etc. literally exist – from its many critics. Although much of Katz's second period of thinking differs from his first, there are several strands that unite his thinking. One of the most important of these is his belief in the significance of the analytic/synthetic distinction. Although this distinction suffered heavily at the hands of Willard van Orman Quine, Hilary Putam, and others, Katz was a perpetually staunch supporter of the distinction. Katz treated the notion of analyticity as a scientific term, one which might undergo a change in meaning as linguistic theory developed. According to him, the most appropriate use of the notion of an analytic sentence was not one that was "true in virtue of meaning alone". Instead, an analytic sentence is one in which various constituents of the sentence bear certain kinds of relations to one another. According to this revised notion of analyticity, "The present king of France is male" counts as analytic, even though it is not true in virtue of its meaning.

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Terence Parsons

Terence Parsons (1939 –) received his Bachelor's degree in Physics from the University of Rochester, and his PhD in Philosophy from Stanford University. He has taught at the University of Pittsburgh, Berkeley, University of Illinois at Chicago Circle, University of Massachusetts, Amherst, U. C. Irvine, and is currently Professor of Philosophy and of Linguistics at UCLA. He received his PhD in Philosophy from Stanford University in 1966.

Parsons has been a major contributor to numerous areas of philosophy, including the philosophy of language and linguistics, metaphysics, philosophical logic, and the history of these areas. These diverse interests are unified by the theme of constructing a formal semantics for natural language. A primary focus of Parsons' research has been to expose the underlying metaphysics of natural languages like English by clarifying the logical properties of these

languages. In numerous books and publications, Parsons has shown the importance of clarifying the logical structure of natural language via the apparatus of formal languages of mathematical logic. In particular, he has argued that various important metaphysical claims can be defended by this technique. For instance, In *Events in the Semantics of English*, Parsons presents a sophisticated development and defense of the Davidsonian view that even our simplest sentences contain quantification over events. In particular, Parsons shows how this view successfully addresses a broad range of syntactic and semantic issues of contemporary theoretical linguistics. For example, the proper logical structure of "Mary built the house" is not simply "Bmh", with the meaning that Mary (= m) stands in the relation of building (= B) to the house (= h). Instead, Parsons argues that there are linguistic and philosophical reasons for treating the sentence as having a much more complicated structure, roughly given by the gloss "There is an event e which occurs before the present time, and e is a building event with Mary as the agent of e and the house as the theme of e, and the event e culminates." In short, Parsons treats verbs as fundamentally predicates of events (or other eventlike entities), although the verb also specifies certain relations, such as "x is the agent of y" that organize the verb's subject, object, etc. into their appropriate semantic roles in the sentence. Similarly, the extra predicate "culminates" enables the sentence to be distinguished from its progressive form, "Mary was building the house", which does not entail that the house was ever built (e.g., in the case where Mary dies before finishing it). In such a case the event of building does not culminate, but is said to "hold".

In more recent philosophical work (2000), Parsons has defended the view that identity is not a determinate relation. For example, if a ship is rebuilt bit by bit until the resulting ship is made of entirely different parts, it is natural to wonder whether the resulting ship is identical to the ship before any rebuilding began. Parsons argues that there is no answer to such a question because ships are only indeterminately identical. So the fact that we cannot determine whether the two ships are the same is not due to a failing of our rational powers or an imperfection of language, but is due to the metaphysical nature of the universe.

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Brian Skyrms

Brian Skyrms (1938 –) is professor in both the department of Logic and Philosophy of Science and the department of Economics at UC Irvine. As an undergraduate, he studied economics and philosophy at Lehigh University in Bethlehem, PA. He earned his masters' degree and his doctorate in philosophy from the University of Pittsburgh. Since then, he has taught at San Fernando Valley State College, the University of Delaware, and the University of Illinois at Chicago. He joined the faculty at UC Irvine in 1980.

In 1999, Skyrms' *The Evolution of the Social Contract* received the Imre Lakatos award – the most esteemed award for a book in the philosophy of science. That same year, Skyrms was elected to the National Academy of Sciences, one of the most prestigious societies in science. In 1994, he was elected to the American Academy of Arts and Sciences, and has received numerous other awards and honors.

Skyrms' research has primarily been in the philosophy of science, decision theory, logic, and the philosophy of language. Much of his work can be characterized by his methods, which

follow standard scientific operating procedures. In many of his books and papers, Skyrms begins by introducing a large and important philosophical issue. Rather than trying to address it all at once, he identifies a part of issue, or a useful idealization of the issue, and shows how this refined question can be decisively answered using a variety of mathematical techniques. For instance, Skyrms has examined the conditions under which various kinds of conventions and aspects of the social contract do and do not develop. Instead of speculating on the origins of e.g., distributive justice, he explored the evolutionary behavior of a number of models of interaction. Imagine, for example, a population of agents whose only source of interaction occurs when two of them meet and must decide how to split a cake. They will each demand a proportion of the cake, and if the sum of the two proportions is less than one, they will each get what they asked for. If the sum is greater than one, neither will get any of the cake. Each agent always demands the same amount, and each offspring of that agent demands that same amount as well. Assume further that there is selective advantage in receiving cake – those who receive more cake tend to produce more offspring, whereas those who get less cake tend to produce less offspring. Using this model, Skyrms raised the question of whether evolution favors those subpopulations that tend to ask for only half the cake in such a situation, which intuitively seems like the "fair" amount to ask for. He found that in a population containing three sub-groups – those who always demand either one-half, one-third, or two-thirds of the cake – the population typically tended to evolve in such a way as to favor the subpopulation of those demanding one-half of the cake. Skyrms also showed that this phenomenon holds under various conditions, such as different initial proportions of the three subpopulations, and different probabilities of two members of the population encountering one another. Such results, Skyrms suggests, are "perhaps, a beginning of an explanation of our concept of justice" (1994, p. 320).

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Zeno Vendler

Zeno Vendler (1921 –) Taught at Cornell, University of Calgary, Rice University, UCSD, Cornell, University of Calgary. He currently resides in San Diego, California.

Vendler is best known for his work at the intersection of linguistics, philosophy of language and philosophy of mind. A common theme running through his first three books is that there is great philosophical payoff to be had from the investigation of the structure of words and the way they behave in various contexts. In this sense, he was among the last and linguistically most sophisticated of the ordinary language philosophers. One of Vendler's most lasting and important contributions concerns the general notion of the "aspect" of a verbal phrase. Although Vendler credited Aristotle with this discovery, Vendler's own work resurrected, clarified and greatly expanded the notion. The "Vendler Classification" is now a standard notion of contemporary linguistic theory.

Vendler's classification broke verbal phrases into four categories, depending on whether they had one, both, or neither of two independent properties. The first property was telicity. A verbal phrase is telic if, as a part of its meaning, it specifies a goal or endpoint, as in "build the house" and "reach the top of the mountain". Verbal phrases lacking such an endpoint specified as a part of their meaning were called "atelic", and they include "laugh" and "know the answer".

Vendler famously showed that a mark of telicity and atelicity concerns what sort of durational modifications can be added to the verbal phrase. It is completely normal to say, for instance, that Mary built the house in two weeks or that she reached the top of the mountain in two weeks. However, it is not as natural to say that Mary built the house for two weeks or that she reached the top for two weeks. In contrast, the only meaning that can be assigned to sentences like 'sue laughed in an hour" or 'sue knew the answer in an hour" is one where "in an hour" means something similar to "within an hour after some previously specified time". Importantly, "in an hour" cannot mean what it can mean when it modifies a telic phrase. Similarly, there is no oddity at all in the sentences 'sue laughed for an hour" and 'sue knew the answer for an hour". The "for an hour"/ "in an hour" test is widely used today as a diagnostic of telicity.

The second property is that of continuity. A verbal phrase is continuous if they specify processes consisting of 'successive phases following one another in time" (1967, p. 99). For example "drive the car" and "draw a picture" are both continuous expressions. In contrast, "lose the keys" and "be made of wood" are discontinuous. As with telicity, Vendler noted that there were several diagnostic tests for continuity. In general, only continuous verbal phrases comfortably take the progressive. So although it is natural to say that John was driving the car or drawing a picture yesterday, it would be much less natural to say that he was losing his keys or that the chair was being made of wood.

Although much of Vendler's work involved the careful analysis of everyday language, such efforts were always directed toward understanding traditional philosophical issues from epistemology, metaphysics, and the philosophy of mind and language.

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