

Philosophy Of Language

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Introduction

philosophical investigation of the nature of language; the relations between language, language users, and the world; and the concepts with which language is described and analyzed, both in everyday speech and in scientific linguistic studies. Because its investigations are conceptual rather than empirical, the philosophy of language is distinct from linguistics, though of course it must pay attention to the facts that linguistics and related disciplines reveal.

Scope and background

Thought, communication, and understanding

Language use is a remarkable fact about human beings. The role of language as a vehicle of thought enables human thinking to be as complex and varied as it is. With language one can describe the past or speculate about the future and so deliberate and plan in the light of one's beliefs about how things stand. Language enables one to imagine counterfactual objects, events, and states of affairs; in this connection it is intimately related to intentionality, the feature of all human thoughts whereby they are essentially about, or directed toward, things outside themselves. Language allows one to share information and to communicate beliefs and speculations, attitudes and emotions. Indeed, it creates the human social world, cementing people into a common history and a common life-experience. Language is equally an instrument of understanding and knowledge; the specialized languages of mathematics and science, for example, enable human beings to construct theories and to make predictions about matters they would otherwise be completely unable to grasp. Language, in short, makes it possible for individual human beings to escape cognitive imprisonment in the here and now. (This confinement, one supposes, is the fate of other animals—for even those that use signaling systems of one kind or another do so only in response to stimulation from their immediate environments.)

The evidently close connection between language and thought does not imply that there can be no thought without language. Although some philosophers and linguists have embraced this view, most regard it as implausible.

Prelinguistic infants and at least the higher primates, for example, can solve quite complex problems, such as those involving spatial memory. This indicates real thinking, and it suggests the use of systems of representation—“maps” or “models” of the world—encoded in nonlinguistic form. Similarly, among human adults, artistic or musical thought does not demand specifically linguistic expression: it may be purely visual or auditory. A more reasonable hypothesis regarding the connection between language and thought, therefore, might be the following: first, all thought requires representation of one kind or another; second, whatever may be the powers of nonlinguistic representation that human adults share with human infants and some other animals, those powers are immensely increased by the use of language.

The “mist and veil of words”

The powers and abilities conferred by the use of language entail cognitive successes of various kinds. But language may also be the source of cognitive failures, of course. The idea that language is potentially misleading is familiar from many practical contexts, perhaps especially politics. The same danger exists everywhere, however, including in scholarly and scientific research. In scriptural interpretation, for example, it is imperative to distinguish true interpretations of a text from false ones; this in turn requires thinking about the stability of linguistic meaning and about the use of analogy, metaphor, and allegory in textual analysis. Often the danger is less that meanings may be misidentified than that the text may be misconceived through alien categories entrenched (and thus unnoticed) in the scholar's own language. The same worries apply to the interpretation of works of literature, legal documents, and scientific treatises.

The “mist and veil of words,” as the Irish philosopher George Berkeley (1685–1753) described it, is a traditional theme in the history of philosophy. Confucius (551–479 BC), for example, held that, when words go wrong, there is no limit to what else may go wrong with them; for this reason, “the civilized person is anything but casual in what he says.” This view is often associated with pessimism about the usefulness of natural language as a tool for acquiring and formulating knowledge; it has also inspired efforts by some philosophers and linguists to construct an “ideal” language—i.e., one that would be semantically or logically “transparent.” The most celebrated of these projects was undertaken by the great German polymath Gottfried Wilhelm Leibniz (1646–1716), who envisioned a “universal characteristic” that would enable people to settle their disputes through a process of pure calculation, analogous to the factoring of numbers. In the early 20th century the rapid development of modern mathematical logic. similarly inspired the idea of a language in which grammatical form would be a sure guide to meaning, so that the inferences that could legitimately be drawn from propositions would be clearly visible on their surface.

Outside philosophy there have often been calls for replacing specialized professional idioms with “plain” language, which is always presumed to be free of obscurity and therefore immune to abuse. There is often something sinister about such movements, however; thus, the English writer George Orwell (1903–50), initially an enthusiast, turned against the idea in his novel *1984* (1949), which featured the thought-controlling “Newspeak.” Yet he continued to hold the doubtful ideal of a language as “clear as a windowpane,” through which facts would transparently reveal themselves.

Skepticism

In his dialogue *Cratylus*, the Greek philosopher Plato (428/427–348/347 BC) identified a fundamental problem regarding language. If the connection between words and things is entirely arbitrary or conventional, as it seems to be, it is difficult to understand how language enables human beings to gain knowledge or understanding of the world. As William Shakespeare (1564–1616) later put the difficulty: "What's in a name? That which we call a rose by any other name would smell as sweet." According to this view, words do nothing to disclose the natures of things: they are merely other things, to set alongside roses and the rest, without any cognitive value in themselves. This indeed was how they were regarded by Plato's adversaries, the Sophists, who viewed language merely as a tool for influencing people, as in law courts and assemblies.

If this kind of skepticism seems natural, it is because conventionalism about names is closely related to conventionalism about truth. A person who says that animal is a tiger seems to communicate only that the thing he names as that animal falls into the class of things he names as tiger. But if it is arbitrary or conventional which class of things tiger names, how does his statement communicate any real knowledge?

Plato thought that the only possible explanation is to suppose that words are by nature connected to the things they name. This view survives in some religious traditions, which hold that it is impious to speak the name of God, and equally in fairy tales like "Rumpelstiltskin," where to gain the dwarf's name is to gain power over him. It is also closely related to the ideal of plain or self-interpreting speech, as well as to the notion that some languages display an enviable closeness to the nature of things. This is in fact what the 20th-century German philosopher Martin Heidegger (1889–1976) supposed of pre-Socratic Greek, and it is also suggested in Orwell's metaphor of language as a windowpane.

Plato was sometimes inclined to think that knowledge and understanding are possible independently of language. He was characteristically wary of the power of words, which the Sophists relied upon—hence his mistrust of rhetoric and his banishment of poets and artists from the ideal state he described in the *Republic*. He preferred to think instead of the naked encounter of the properly trained mind with the Forms, or essences, of things. Language could only be an unwanted third party in such a confrontation. At other times, however, Plato seemed to recognize that this view is inadequate: in the late dialogue *Parmenides*, for example, he returned to the issue of the correctness of words, though he failed to provide any clear account of how they manage to express knowledge or aid reason.

Traditional questions

After the death of Aristotle (384–322 BC), Plato's greatest student, problems in the philosophy of language tended to fall into one or the other of two broad categories. The first category concerns the relation between people and language; the second concerns the relation between language and the world. Key problems in the first category include the question of what it means to possess a language, the use of language in understanding and conceptualization, and the nature of communication and interpretation. Since about the mid-20th century the topics of communication and interpretation have been the purview of the philosophical and linguistic discipline of pragmatics; such investigations have been aimed at elucidating the rules and conventions that make communication possible and at describing the varied and complex uses to which language is put (see below Practical and expressive language). Problems in the second category, concerning the relation between language and the world, include the nature of reference, predication, representation, and truth. They are studied primarily in the discipline of semantics, which is also a branch of both philosophy and linguistics.

Although the differences between the two categories are clear enough, there are also close relations between them. Knowing what a person says, for example, is a matter of knowing what truth (or falsehood) his words convey; so communication itself requires cognizance of the connection between language and the world. Similarly, a philosophical view of truth in a certain area of discourse may have implications for a conception of what communication in that area consists of. If one is skeptical about the possibility of truth in ethics, for example, one is more likely to think of ethical communication as a kind of persuasion or prescription than as a means of conveying genuine knowledge. Conversely, a certain attitude toward the rules or conventions governing communication may have implications for one's conception of reference or truth. If one thinks of the conventions as vague or fluid, one will be less likely to see truth as a crisp, all-or-nothing affair. Often this interplay means that there is no consensus on what should be the entry point—the first or basic task—of the philosophy of language.

Words and ideas

If one thinks of minds as stocked with ideas and concepts prior to or independently of language, then it might seem that the only function language could have is to make those ideas and concepts public. This was the view of Aristotle, who wrote that "spoken words are signs of concepts." It was also the view of the English philosopher John Locke (1632–1704), who asserted that God made human beings capable of articulate sound. This capacity, however, does not by itself constitute having a language, since articulate sounds are produced even by parrots, as Locke himself noted. In order for human beings to have language, therefore, it was further necessary that [man] should be able to use these sounds as signs of internal conceptions, and to make them stand as marks for the ideas within his own mind; whereby they might be made known to others, and the thoughts of men's minds be conveyed from one to another.

According to this conception, words are simply vehicles for ideas, which have an independent, self-sustaining existence. To use another metaphor, although words may be the midwives of ideas, their true parents are experience and reason. Leibniz suggested the same model, writing that "languages are the best mirror of the human mind."

It was typical of Locke to see words as devices more for veiling truth than for revealing it. In his view, words have little or no cognitive function; indeed, they interfere with the direct contact possible between the mind and the light of truth. Understanding and knowledge are private possessions, the fruit of an individual's labour in conforming his ideas to reason and experience. Hence, listening to the words of others yields not knowledge but only opinion. The contrary view—that ideas, as the creatures of words, are public possessions and essential instruments of public knowledge—did not become common in the philosophy of language until the end of the 19th century. Locke's picture of the independent existence of ideas did not imply any particular answer to the question of whether language is shaped by the mind or the mind shaped by language. However, the intellectual climate of 18th-century Europe, shaped by increasing exposure to the histories and cultures of peoples outside the continent, tended to favour the second alternative over the first. Thus, the considerable differences between European and non-European languages and the difficulty initially involved in translating between them cast doubt on the existence of any universal stock of ideas, or any universal way of categorizing experience in terms of such ideas. They suggested instead that linguistic habits determine not only how people describe the world but also how they experience it and think about it. The first linguistic theorist to affirm this priority explicitly was Wilhelm von Humboldt (1767–1835), whose approach eventually culminated in the celebrated ‘Sapir-Whorf hypothesis,’ formulated by the American linguists Edward Sapir (1884–1939) and Benjamin Lee Whorf (1897–1941) on the basis of their work on the diverse (and disappearing) indigenous languages of North America. Their conjecture, in Sapir's words, was: Human beings do not live in the objective world alone—but are very much at the mercy of the particular language which has become the medium of expression for their society. The worlds in which different societies live are distinct worlds, not merely the same world with different labels attached.

According to a weak interpretation of this hypothesis, language influences thought in such a way that translation and shared understanding are difficult but not impossible. Different languages are at varying ‘distances’ from each other, and the difficulty of saying in one what can be said easily in another is the measure of the distance between them. According to its strongest interpretation, the hypothesis implies linguistic conceptual relativism, or ‘linguistic relativity,’ the idea that language so completely determines the thoughts of its users that there can be no common conceptual scheme between people speaking different languages. It also implies linguistic idealism, the idea that people cannot know anything that does not conform with the particular conceptual scheme their language determines. Although many philosophers have been disconcerted by this picture, others have found it appealing, notably Nelson Goodman in the United States and advocates of deconstruction and philosophical postmodernism in France and elsewhere. It was influentially opposed, on the other hand, by the American philosopher Donald Davidson (1917–2003). Davidson argued that, because translation or interpretation necessarily involves the attribution of beliefs and desires to speakers and because such attributions necessarily assume that speakers are right about most things most of the time, one cannot assign meanings to the utterances of others unless one already shares a conceptual scheme with them. Indeed, unless interpretation on the basis of a common conceptual scheme is possible, one cannot view others as ‘thinking’ at all. Hence, one cannot treat his own conceptual scheme as just one among many. With linguistic relativism thus disposed of, the threat of linguistic idealism also is removed. Davidson's argument is certainly bold. But it is rather like arguing that, since noises sufficiently unlike Mozart's music do not count as music, there is no music other than Mozart's. Davidson seems to deny that knowledge of any radically different form of life is possible: there can be no genuine expansion of a conceptual scheme, only a translation or interpretation of it into a new language. For this reason, therefore, it is quite possible to view Davidson's argument not as a solution to the relativistic predicament but as a testament to its depth.

Frege's revolution

According to Locke, ideas exist independently of words, which serve merely as their vehicles. Locke's emphasis on individual words, as well as the foundational role he assigned to psychology, were attacked by the German logician Gottlob Frege (1848–1925), who is generally regarded as the father of modern philosophy of language. Primarily a mathematician, Frege's interest in language developed as a result of his attempt to devise a logical notation adequate for the formalization of mathematical reasoning. As a part of this effort, he invented not only modern mathematical logic but also a groundbreaking philosophical theory of meaning. The fundamental notion of this theory is that the meaning of a sentence—the ‘thought’ it expresses—is a function of its structure, or syntax. The thought, in turn, is determined not by the psychological state of the speaker or hearer—thoughts are not ‘mental’ entities—but by the logical inferences the sentence permits. Sentence meaning, furthermore, is prior to word meaning, in the sense that the meanings of individual words are determined only by what they contribute to the thoughts expressed by the sentences in which the words appear. (This idea had in fact been anticipated by the English philosopher Jeremy Bentham [1748–1832].) Frege's theory of sentence meaning explains how it is possible for different people to grasp the same thought—such as The North Sea covers an area of 220,000 square miles—though no two people associate the corresponding sentence with exactly the same ideas, images, or other mental experiences.

An enormously influential element of Frege's theory of meaning was his distinction between the referent (*Bedeutung*) of an expression—the thing it refers to—and its sense (*Sinn*). The sense of an expression is both its contribution to the thought expressed by the sentence and the ‘mode of presentation’ of its referent. By means of this distinction, Frege was able to show how there can be informative statements of identity. The sentence Everest is Chomolungma, for example, is informative—and it may even represent a geographic

discovery—whereas the sentence Everest is Everest is not. Yet they appear to have the same meaning—both seem to say, of one and the same mountain, that it is identical to itself. How, then, can one sentence be informative and the other trivial? Frege's answer is that, whereas Everest and Chomolungma (the Tibetan name) have the same referent, they have different senses: they 'present' the mountain in different ways. The distinct senses accordingly make different contributions to the thoughts expressed by the two sentences. In Frege's logic, sentences and singular terms are 'complete' or 'saturated' expressions, and predicates are incomplete or unsaturated expressions. Predicates are functions, analogous to the functions of mathematics; thus, is a lecturer and loves are analogous to $\times 4$ (multiplied by 4). The result of applying the predicate $\times 4$ to the numeral 3 is an expression, 12, whose referent is the number obtained when 3 is multiplied by 4. Similarly, the result of attaching the predicate is a lecturer to the name John is a sentence, John is a lecturer, whose value is True if John is a lecturer and False otherwise, likewise the result of attaching loves to John and Mary. In a logical analysis of a sentence, the various predicate-functions are isolated, and the truth-value of the whole is seen to be determined by the outputs of these functions. Frege also treated sentential connectives, such as and and not, as functions producing new truth-values when applied to other sentences as arguments.

The heart of Frege's logical revolution was his treatment of the key notion of generality. Before Frege, for example, there was no logical analysis of sentences such as Everyone has a mother that did not license invalid inferences to sentences such as Someone is everyone's mother. By using the notion of a 'second-order' function—a function that takes other functions as arguments—Frege was able to give such an account. Thereafter, second-order functions became a ubiquitous feature of modern logic and semantic analysis.

Frege's hostility to psychological accounts of meaning led him to regard thoughts and senses as abstract objects akin to Platonic Forms. Here, however, modern philosophers have been reluctant to follow him, not only because this 'third world' of abstract objects is extremely mysterious in itself but also because it seems impossible to account for how users of language manage to come into contact with it. Indeed, it is not clear how such contact, however it is conceived, could count as thinking, since thinking is an activity that takes place in connection with the world of concrete things.

Russell's theory of descriptions

The power of Frege's logic to dispel philosophical problems was immediately recognized. Consider, for instance, the hoary problem of 'non-being'. In the novel *Through the Looking-Glass* by Lewis Carroll, the messenger says he passed nobody on the road, and he is met with the observation, 'Nobody walks slower than you.' To this the messenger replies, 'I'm sure nobody walks much faster than I do,' which in turn makes it seem strange that he (the messenger) could overtake him (Nobody). The problem arises from treating nobody as a singular term, one that must refer to some thing—in this case to a mysterious being that does not exist. When nobody is treated as it should be—as a quantifier—the sentence I passed nobody on the road can be understood as meaning that the predicate ...was passed by me on the road is unsatisfied. There is nothing paradoxical or mysterious about this.

In his paper *On Denoting* (1905), the English philosopher Bertrand Russell (1872–1970) took the further step of bringing definite descriptions—noun phrases of the form the so and so, such as the present king of France—into the scope of Frege's logic. The problem addressed by Russell was how to account for the meaningfulness of definite descriptions that do not refer to anything. Such descriptions are commonly used in formal mathematical reasoning, as in a proof by *reductio ad absurdum* that there is no greatest prime number. The proof consists of deriving a contradiction from the sentence Let x be the greatest prime number, which contains a description, the greatest prime number, that by hypothesis does not refer. If the description is treated as a Fregean singular term, however, then it is not clear what sense it could have, since sense, according to Frege, is the mode of presentation of a referent.

Russell's brilliant solution is to see such descriptions as in effect quantificational. Let x be the greatest prime number is analyzed as Let x be prime and such that no number greater than x is prime. Similarly, Russell's celebrated example The present king of France is bald is analyzed as There is an x such that: (i) x is now king of France, (ii) for any y , if y is now king of France, then $y = x$, and (iii) x is bald. In other words, there is one and only one king of France, and that individual is bald. This sentence is false but not nonsensical. Crucially, since the present King of France does not function as a singular term in the analysis, no referent for it is required to make the description or the sentence meaningful. The analysis works not by asking what the present king of France refers to but by accounting for the meanings of sentences in which the present king of France occurs; the Fregean priority of sentence meaning over word meaning is thus maintained. In this paper Russell took himself to be inaugurating a program of analysis that would similarly show how many other kinds of philosophically puzzling entities are actually 'logical fictions';

Frege and Russell initiated what is often called the 'linguistic turn' in Anglo-American philosophy. Until that time, of course, language had provided certain topics of philosophical speculation—such as meaning, understanding, reference, and truth—but these topics had been treated as largely independent of others that were unrelated (or not directly related) to language—such as knowledge, mind, substance, and time. Frege, however, showed that fundamental advances in mathematics could be made by studying the language used to express mathematical thought. The idea rapidly generalized: henceforward, instead of studying, say, the nature of substance as a metaphysical issue, philosophers would investigate the language in which claims about substance are expressed, and so on for other topics. The philosophy of language soon achieved a foundational position, leading to a 'golden age' of logical analysis in the first three decades of the 20th century. For the practitioners of the new philosophy,

modern logic provided a tool for exhaustively categorizing the linguistic forms in which information could be expressed and for identifying the determinate logical implications associated with each form. Analysis would uncover philosophically troublesome logical fictions in sentences whose logical forms are unclear on the surface, and it would ultimately reveal the nature of the reality to which language is connected. This vision was stated with utmost severity and rigour in the *Tractatus Logico-Philosophicus* (1921), by Russell's brilliant Austrian pupil Ludwig Wittgenstein (1889–1951).

Wittgenstein's *Tractatus*

In the *Tractatus*, sentences are treated as "pictures" of states of affairs. As in Frege's system, the basic elements consist of referring expressions, or "logically proper" names, which pick out the simplest parts of states of affairs. The simplest propositions, called "elementary" or "atomic," are complexes whose structure or logical form is the same as that of the state of affairs they represent. Atomic sentences stand in no logical relation to one another, since logic applies only to complex sentences built up from atomic sentences through simple logical operations, such as conjunction and negation. Logic itself is trivial, in the sense that it is merely a means of making explicit what is already there. It is "true" only in the way that a tautology is true—by definition and not because it accurately represents features of an independently existing reality.

According to Wittgenstein, sentences of ordinary language that cannot be constructed by logical operations on atomic sentences are, strictly speaking, senseless, though they may have some function other than representing the world. Thus, sentences containing ethical terms, as well as those purporting to refer to the will, to the self, or to God, are meaningless. Notoriously, however, Wittgenstein pronounced the same verdict on the sentences of the *Tractatus* itself—thus suggesting, to some philosophers, that he had cut off the branch on which he was sitting.

Wittgenstein's own metaphorical injunction, that the reader must throw away the ladder once he has climbed it, does not seem to resolve the difficulty, since it implies that the reader's climb up the ladder actually gets him somewhere. How could this be—what could the reader have learned—if the sentences of the *Tractatus* are senseless?

Wittgenstein denied the predicament, asserting that in his treatise the logical form of language is "shown" but not "said." This contrast, however, remains notoriously unclear, and few philosophers have been brave enough to claim that they fully understand it.

Logical positivism

Despite these difficulties, in the 1920s and '30s Russell's program, and the *Tractatus* itself, exerted enormous influence on a philosophical discussion group known as the Vienna Circle and on the movement it originated, logical positivism. Flamboyantly introduced to the English-speaking world by the Oxford philosopher Sir A.J. Ayer (1910–89), logical positivism combined the search for logical form with ideas inherited from the tradition of British empiricism, according to which words have meaning only insofar as they bear some satisfactory connection to experience. The Scottish empiricist David Hume (1711–76), for example, held that words are the signs of ideas in the mind, and ideas are either direct copies of perceptual experiences or complexes of such ideas. The Fregean shift toward sentences as the basic unit of meaning entailed that such an account—based on individual words and ideas and based on a simple sensory model of the mind—needed revision, but its basic empirical orientation remained.

Reacting to Hume, the German philosopher Immanuel Kant (1724–1804) complained that the British empiricists—Locke in particular—had "sensitized the conceptions of the understanding." Kant recognized that applying a concept involves more than just attaching a word to a kind of mental picture; it also involves deploying a rule. Subsequent empiricists responded by insisting that there must be some satisfactory contact with experience for such deployment to be possible. In the view of the logical positivists, this contact consists of the method by which a meaningful sentence can be empirically verified. A non-tautological sentence is meaningful, according to their slogan, just in case it is possible (at least in principle) to verify it empirically; indeed, the meaning of such a sentence just is its method of verification. Thus, the positivist analysis of a science—or any other body of knowledge—distinguished between a base of bare "protocol sentences," or descriptions of experience, and a superstructure of theoretical sentences that serve to systematize and predict the patterns such experience may take. The semantic content of theoretical sentences is thus entirely determined by the sentences' logical connections to patterns of experience. Therefore, whatever unobservable theoretical entities they may refer to—such as the elementary subatomic particles—are merely "logical constructions" from these patterns.

The wide appeal of logical positivism stemmed in part from its iconoclastic contention that sentences that are empirically unverifiable are meaningless. The ostensibly unverifiable sentences of metaphysics and religion were exuberantly consigned to the dustbin, and logic itself escaped only because it was regarded as tautologous. Like Wittgenstein, the logical positivists held that ethics is not a domain of knowledge or representation at all—though some logical positivists (Ayer included) spared ethical sentences from pure meaninglessness by according them an "emotive" or "expressive" function.

In the early 1930s, as logical positivism flourished, the logical investigation of language achieved its greatest triumph in work by Kurt Gödel (1906–78), the brilliant Austrian mathematician, on the nature of proof in languages within which mathematical reasoning has been formalized. Gödel showed that no such language can formalize proofs of all true mathematical propositions. He also showed that no such system can prove its own consistency: a stronger set of logical assumptions is needed to prove the consistency of a weaker set (a result of profound importance in the theory of computing). Gödel's work required delicate handling of the idea of using one language (a metalanguage) to talk about another (an object language). This idea in turn enabled the Polish logician Alfred Tarski (1902–83) to address problems that had been largely neglected by the *Tractatus* and the logical positivists, in particular the elucidation of

semantic notions such as truth and reference.

In the study of formal languages, logicians need pay little attention to semantic relations, since they can simply decree a particular interpretation of terms and then go on to consider the logical structure generated by that decree. But the nature of the decree itself is not a topic of study within logic. Similarly, the *Tractatus* did not elucidate the semantic relations between logically proper names and simple parts of states of affairs. But a philosophy as universal in its intent as logical positivism needs to say something about truth and reference. Some logical positivists, indeed, held that no such account was possible, since giving one would require 'stepping out of one's own skin'—somehow obtaining an independent perspective on both language and the world while all the time trapped inside a language and having no linguistically uncontaminated access to the world. Tarski's work offered a more scientific solution. The basic idea is that one can specify what the truth of a particular sentence consists of by saying what the sentence means. A definition of is true for a particular object language is adequate if it enables one to construct, for every sentence of that language, a sentence of the form 'X is true if and only if p, where X is a sentence in the object language, p is a sentence in the metalanguage one uses to talk about the object language, and X has the same meaning as p. Thus, a definition of is true for German, using English as a metalanguage, would entail that *Es schneit* is true if and only if it is snowing, *Die welt ist rund* is true if and only if the world is round, and so on. One understands all there is to understand about truth in German when one knows the totality of such sentences—there is nothing else to know. The moral of the exercise, philosophically, is that there is nothing general to say about truth. Tarski himself seemed to regard his theory as a logically sophisticated version of the intuitive idea of truth as 'correspondence to the facts.' As such, the theory eliminates traditional objections concerning the obscure nature of facts and the mysterious relation of correspondence by avoiding even the appearance of a general account.

Tarski's work on truth is one of the few enduring legacies of logical positivism. Much of the rest of the program, in contrast, soon encountered very serious problems. It is not really plausible to suppose, for example, that one's understanding of the historical past is adequately captured in one's experiences of 'verifying' facts about it. Indeed, the very notion of such verifying experiences is extremely elusive, if only because it is immensely difficult, if not impossible, to draw a coherent boundary between the way an experience is conceived or characterized and the theory an experience is supposed to confirm. But other problems, too, lurked in the wings.

The later Wittgenstein

Frege's theory of meaning, for all its sophistication, relied on an unsatisfactory account of thoughts as abstract objects. The *Tractatus* did not have to deal with such a problem, because it treated meaning—and language altogether—independently of the ways in which language is actually used by human beings. Less than 10 years after the work's completion, however, Wittgenstein came to believe that this dimension of language is of paramount importance. Without some account of it, he now thought, the entire system of the *Tractatus* would collapse like a house of cards. In writings and teachings from 1930 on, accordingly, he emphasized the connections between words and practical human activities. Words are animated, or given meanings, by such activities—and only by them. In the variety of little stories describing what he calls 'language games,' Wittgenstein imagined people counting, calling for tools, giving directions, and so on. Comparing the meaning of a word to the power of a piece in chess, he insisted that it is only in the context of human activity that meaning exists. By conceiving of language apart from its users, therefore, the *Tractatus* had overlooked its very essence. The slogan accordingly associated with Wittgenstein's later work is that 'Meaning is use,' though he himself never expressed this view in such an unqualified form. One of Wittgenstein's principal themes is the open-ended or open-textured nature of linguistic dispositions. Although it may seem, especially to philosophers, that word usage is determined by the application of distinct and definite rules—and thus that knowing the meaning of a word is the same as knowing the corresponding rule—careful examination of actual speech situations shows that in no case can a single rule account for the countless variety of uses to which an individual word may be put. Wittgenstein asks, for example, what rule would explain the great variety of things that may be called a game. When one looks for something that all games have in common, one finds only 'a complicated network of similarities overlapping and criss-crossing: sometimes overall similarities, sometimes similarities of detail.' The different games seem to be united only by a vague 'family resemblance.' The usage of the word, therefore, is determined not by a complicated rule or definition—even one applied unconsciously—but only by a fairly relaxed disposition to include some things and to exclude others. If there is any rule involved at all, it is a trivial one: call games only those things that are games. Thus, knowledge of word meaning, and membership in the linguistic community generally, is not a matter of knowing rules but only of sharing dispositions to apply words in something like the way other people do. There is no conceptual foundation for this activity: the concept is generated by the usage, not the usage by the concept.

This means in particular that word usage cannot be founded in Lockean ideas. Wittgenstein's refutation of this view is one of the most devastating short proofs in philosophy. He first poses the problem of how someone can understand the order to bring a red flower from a meadow: 'How is he to know what sort of flower to bring, as I have only given him a word?' One possibility is that the hearer associates the word red with an idea (a mental image of red) and then looks for a flower matching the image. Wittgenstein says,

But this is not the only way of searching and it isn't the usual way. We go, look about us, walk up to a flower and pick it, without comparing it to anything. To see that the process of obeying the order can be of this kind, consider the order 'imagine a red patch.' You are not tempted in this case to think that before obeying you must have imagined a red patch to serve you as a pattern for the red patch which you were ordered to imagine.

The most-celebrated passages in Wittgenstein's late masterpiece *Philosophical Investigations* (1953) attempt to unseat the notion of private experience. Their interpretation is endlessly controversial, but the basic idea is that objects of thought cannot include elements that are purely "private"; to a single individual—as sensations, for example, are supposed to be. For if there were private objects of thought, then there could be no distinction, in what one says about one's own thoughts, between being right and merely seeming to be right. Objects of thought, therefore, must be essentially public, checkable items about which one can in principle converse with others.

Not only experience and observation but also reason and logic are transfigured in Wittgenstein's later philosophy. For Frege and Russell, the propositions of logic and mathematics are pristinely independent of sense experience, depending for their truth only on the structures of the abstract world they describe—a world made accessible to human beings through the light of pure reason. This vision was later somewhat compromised by the logical positivists' assimilation of logic and mathematics to tautology and convention. In the later Wittgenstein, however, the entire distinction between logical and empirical truth becomes unclear. Logic, for example, is a set of practices and therefore a language, perfectly in order as it stands; what counts in logic as a correct application of a term or a permissible inference, therefore, depends only on what logicians do. As with word meanings in more-ordinary contexts, what matters are the settled dispositions of those who use the language in question. Because these dispositions may change, however, meaning is not—at least in principle—fixed and immutable. The rules reflecting common usage, including even fundamental physical principles and the laws of logic themselves, may change, provided enough of the relevant linguistic community begins using old words in new ways. The securest and most certain of truths may be coherently rejected, given that the rules underlying them have changed appropriately. There are no "higher" rules by which to evaluate these changes.

An uncomfortable vision opens up at this point. The very idea of truth seems to presuppose some notion of correctness in the application of words. If one calls a hippopotamus a cow, except metaphorically or analogically, then presumably one has gotten something wrong. But if the rule for applying the word cow is derived entirely from linguistic practice, what would make this case merely a mistake and not a change in the rule—and thus a change in what the word cow means? An adequate answer to this question would seem to require some account of what it is for a rule to be "in force." Wittgenstein suggests in some passages that there is no substance to this notion: in normal times, everyone dances in step, and that is all there is to it. This suggestion is made with particular force in the discussion of rule following in the *Philosophical Investigations*. It is clear nevertheless that Wittgenstein believed that the distinction between mistake and innovation could be made.

Ordinary language philosophy

Wittgenstein's later philosophy represents a complete repudiation of the notion of an ideal language. Nothing can be achieved by the attempt to construct one, he believed. There is no direct or infallible foundation of meaning for an ideal language to make transparent. There is no definitive set of conceptual categories for an ideal language to employ. Ultimately, there can be no separation between language and life and no single standard for how living is to be done. One consequence of this view—that ordinary language must be in good order as it is—was drawn most enthusiastically by Wittgenstein's followers in Oxford. Their work gave rise to a school known as ordinary language philosophy, whose most influential member was J.L. Austin (1911–60). Rather as political conservatives such as Edmund Burke (1729–97) supposed that inherited traditions and forms of government were much more trustworthy than revolutionary blueprints for change, so Austin and his followers believed that the inherited categories and distinctions embedded in ordinary language were the best guide to philosophical truth. The movement was marked by a schoolmasterly insistence on punctilious attention to what one says, which proved more enduring than any result the movement claimed to have achieved. The fundamental problem faced by ordinary language philosophy was that ordinary language is not self-interpreting. To assert, for example, that it already embodies a solution to the mind-body problem presupposes that it is possible to determine what that solution is; yet there does not seem to be a method of doing so that does not entangle one in all the familiar difficulties associated with that debate.

Ordinary language philosophy was charged with reducing philosophy to a self-contained game of words, thus preventing it from real engagement with the world of things. This criticism, however, underestimated the depth of the linguistic turn. The whole point of Frege's revolution was that the best—and indeed the only—access to things is through language, so there can be no principled distinction between reflection on things such as numbers, values, minds, freedom, and God and reflection on the language in which such things are talked about. Nevertheless, it is generally acknowledged that the approach taken by ordinary language philosophy tended to discourage philosophical engagement with new developments in other intellectual fields, especially those related to science.

Later work on meaning

Indeterminacy and hermeneutics

Quine

The American philosopher W.V.O. Quine (1908–2000) was the most influential member of a new generation of philosophers who, though still scientific in their worldview, were dissatisfied with logical positivism. In his seminal paper *Two Dogmas of Empiricism* (1951), Quine rejected, as what he considered the first dogma, the idea that there is a sharp division between logic and empirical science. He argued, in a vein reminiscent of the later Wittgenstein, that there is nothing in the logical structure of a language that is inherently immune to change, given appropriate empirical circumstances. Just as the theory of special relativity undermines the fundamental idea that events simultaneous to one observer are simultaneous to all observers, so other changes in what human beings know can alter even their most basic and ingrained inferential habits.

The other dogma of empiricism, according to Quine, is that associated with each scientific or empirical sentence is a determinate set of circumstances whose experience by an observer would count as disconfirming evidence for the sentence in question. Quine argued that the evidentiary links between science and experience are not, in this sense, "one to one." The true structure of science is better compared to a web, in which there are interlinking chains of support for any single part. Thus, it is never clear what sentences are disconfirmed by "recalcitrant experience"; any given sentence may be retained, provided appropriate adjustments are made elsewhere. Similar views were expressed by the American philosopher Wilfrid Sellars (1912–89), who rejected what he called the "myth of the given": the idea that in observation, whether of the world or of the mind, any truths or facts are transparently present. The same idea figured prominently in the deconstruction of the "metaphysics of presence" undertaken by the French philosopher and literary theorist Jacques Derrida (1930–2004). If language has no fixed logical properties and no simple relationship to experience, it may seem close to having no determinate meaning at all. This was in fact the conclusion Quine drew. He argued that, since there are no coherent criteria for determining when two words have the same meaning, the very notion of meaning is philosophically suspect. He further justified this pessimism by means of a thought experiment concerning "radical translation": a linguist is faced with the task of translating a completely alien language without relying on collateral information from bilinguals or other informants. The method of the translator must be to correlate dispositions to verbal behaviour with events in the alien's environment, until eventually enough structure can be discerned to impose a grammar and a lexicon. But the inevitable upshot of the exercise is indeterminacy. Any two such linguists may construct "translation manuals" that account for all the evidence equally well but that "stand in no sort of equivalence, however loose." This is not because there is some determinate meaning—a unique content belonging to the words—that one or the other or both translators failed to discover. It is because the notion of determinate meaning simply does not apply. There is, as Quine said, no "fact of the matter" regarding what the words mean.

The hermeneutic tradition

As an empiricist, Quine was concerned with rectifying what he thought were mistakes in the logical-positivist program. But here he made unwitting contact with a very different tradition in the philosophy of language, that of hermeneutics. Hermeneutics refers to the practice of interpretation, especially (and originally) of the Bible. In Germany, under the influence of the philosopher Wilhelm Dilthey (1833–1911), the hermeneutic approach was conceived as definitive of the humane sciences (history, sociology, anthropology) as distinct from the natural ones. Whereas nature, according to this view, can be thoroughly explained in completely objective terms, human activity, and human beings generally, can be understood only in terms of inherently subjective beliefs, desires, and reasons. This in turn requires understanding the meanings of the sentences human beings speak and understanding the practical and theoretical concepts and norms they employ. Such historical understanding, if it is possible, must be the product of self-conscious interpretation from one worldview into another.

But historical understanding may not be possible. As Davidson argued in connection with conceptual relativism, it could be that human beings of each historical age face a dilemma: either they attempt to understand the worldviews of other periods in terms of their own, thereby inevitably projecting their own form of life onto others, or they resign themselves to permanent isolation from other perspectives. The first option may seem the less pessimistic, but it faces evident difficulties, one of which is that different interpreters read different meanings into the same historical texts. Quine's view may be considered a way out of—or at least around—this dilemma, since there can be no distortion or misunderstanding of meaning if there is no determinate meaning to begin with.

This picture is radical but not in its own terms skeptical. Its character may be illustrated by considering a criticism frequently and easily made by some historians against others. The English philosopher R.G. Collingwood (1889–1943), for example, uncharitably charged Hume with having no real historical understanding, since Hume interpreted the characters he described as though they were Edinburgh gentlemen of his own time. In Hume's defense it can be said, first, that he simply exemplified a universal problem: no historian can do otherwise than to use the meanings and concepts accessible to him. Peering into the depths of history, the historian necessarily sees what is already familiar to him, at least to some extent. Second, however, this problem need not condemn history to being a distortion, since on the radical picture there is no original meaning to distort. If any coherent charge of distortion is possible, it must be significantly qualified to acknowledge the fact that both the author and the object of the distortion are being interpreted from an alien perspective. Thus, a 21st-century historian may charge Hume with distorting Cromwell if, according to the historian, the words Hume uses to report a statement of Cromwell differ in meaning from the words Cromwell actually used. But the charge could equally well be repudiated by those who interpret Hume's report and Cromwell's statement as meaning the same. This is the import of Derrida's celebrated remark that il n'y a pas de hors-texte: "there is nothing outside the text." Every decoding is another encoding.

Indeterminacy and truth

Many philosophers have found the notion of hermeneutic indeterminacy very unsettling, and even Quine seems to have been ambivalent about it. His apparent response was to claim that such indeterminacy is mitigated in practice within the shared dispositions of one's native language—what he called a "home language." This point is connected in Quine's thought with a curious complacency about truth. Although truth might seem to require meaning—because one cannot say something determinately true without saying something determinate—Quine took Tarski's work to show that attributions of truth to sentences within one's home language are perfectly in order. They require only that there be a widely shared disposition within the linguistic community to affirm the sentence in question. Given that the sentence *Dogs bark* is true just in case *dogs bark*, if one's linguistic community

is overwhelmingly disposed to say that dogs bark, then Dogs bark is true. There is nothing more to say about truth than this, according to Quine.

The notion of a secure home language, however, may seem a capitulation to the myth of the given. Arguably, it does nothing to ameliorate indeterminacy. Even within a home language, for example, indeterminacies abound—as they do for English speakers attempting biblical interpretation in English. Hume likewise shared a home language with Cromwell, but this did not prevent Hume's misinterpretation—at least in the estimation of some. Lawyers usually speak the same language as the framers of statutes, but the meanings of statutes are notoriously interpretable. In a situation such as this, in which there seems to be little if any restriction on what one's sentences may mean, it is little comfort to be assured that it is still possible for them to be “true.”

Chomsky

The views common to Quine and the hermeneutic tradition were opposed from the 1950s by developments in theoretical linguistics, particularly the “cognitive revolution” inaugurated by the American linguist Noam Chomsky (born 1928) in his work *Syntactic Structures* (1957). Chomsky argued that the characteristic fact about natural languages is their indefinite extensibility. Language learners acquire an ability to identify, as grammatical or not, any of a potential infinity of sentences of their native language. But they do this after exposure to only a tiny fraction of the language—much of which (in ordinary speech) is in fact grammatically defective. Since mastery of an infinity of sentences entails knowledge of a system of rules for generating them, and since any one of an infinity of different rule systems is compatible with the finite samples to which language learners are exposed, the fact that all learners of a given language acquire the same system (at a very early age, in a remarkably short time) indicates that this knowledge cannot be derived from experience alone. It must be largely innate. It is not inferred from instructive examples but “triggered” by the environment to which the language learner is exposed.

Although this “poverty of the stimulus” argument proved extremely controversial, most philosophers enthusiastically endorsed the idea that natural languages are syntactically rule-governed. In addition, it was observed, language learners acquire the ability to recognize the meaningfulness, as well as the grammaticality, of an infinite number of sentences. This skill therefore implies the existence of a set of rules for assigning meanings to utterances. Investigation of the nature of these rules inaugurated a second “golden age” of formal studies in philosophical semantics. The developments that followed were quite various, including “possible world semantics”—in which terms are assigned interpretations not just in the domain of actual objects but in the wider domain of “possible” objects—as well as allegedly more sober-minded theories. In connection with indeterminacy, the leading idea was that determinacy can be maintained by shared knowledge of grammatical structure together with a modicum of good sense in interpreting the speaker.

Causation and computation

An equally powerful source of resistance to indeterminacy stemmed from a new concern with situating language users within the causal order of the physical and social worlds, the latter encompassing extra-linguistic activities and techniques with their own standards of success and failure. A central work in this trend was *Naming and Necessity* (1980), by the American philosopher Saul Kripke (born 1940), based on lectures he delivered in 1970. Kripke began with a consideration of the Fregean analysis of the meaning of a sentence as a function of the referents of its parts. Kripke repudiated the Fregean idea that names introduce their referents by means of a “mode of presentation.” This idea had indeed been considerably developed by Russell, who held that ordinary names are logically very much like definite descriptions. But Russell also held that a small number of names—those that are logically proper—are directly linked to their referents without any mediating connection. Kripke used a large battery of arguments to suggest that Russell's account of logically proper names should be extended to cover ordinary names, with the direct linkage in their case consisting of a causal chain between the name and the thing referred to. This idea proved immensely fruitful but also immensely elusive, since it required special accounts of fictional names (*Oliver Twist*), names whose purported referents are only tenuously linked with present reality (*Homer*), names whose referents exist only in the future (*King Charles XXIII*), and so forth; it also demanded a new look at Frege's old problem of accounting for informative statements of identity (since the account in terms of modes of presentation was ruled out). Notwithstanding these difficulties, Kripke's work stimulated the hope that such problems could be solved, and similar causal accounts were soon suggested for “natural kind” terms such as *water*, *tiger*, and *gold*.

This approach also seemed to complement a new naturalistic trend in the study of the human mind, which had been stimulated in part by the advent of the digital computer. The computer's capacity to mimic human intelligence, in however shadowy a way, suggested that the brain itself could profitably be conceived (analogously or even literally) as a computer or system of computers. If so, it was argued, then human language use would essentially involve computation, the formal process of symbol manipulation. The immediate problem with this view, however, was that a computer manipulates symbols entirely without regard to their “meanings.” Whether the symbol “\$,” for example, refers to a unit of currency or to anything else makes no difference in the calculations performed by computers in the banking industry. But the linguistic symbols manipulated by the brain presumably do have meanings. In order for the brain to be a “semantic” engine rather than merely a “syntactic” one, therefore, there must be a link between the symbols it manipulates and the outside world. One of the few natural ways to construe this connection is in terms of simple causation.

Teleological semantics

Yet there was a further problem, noticed by Kripke and effectively recognized by Wittgenstein in his discussion of rule

following. If a speaker or group of speakers is disposed to call a new thing by an old word, the thing and the term will be causally connected. In that case, however, how could it be said that the application of the word is a mistake, if it is a mistake, rather than a linguistic innovation? How, in principle, are these situations to be distinguished? Purely causal accounts of meaning or reference seem unequal to the task. If there is no difference between correct and incorrect use of words, however, then nothing like language is possible. This is in fact a modern version of Plato's problem regarding the connection between words and things.

It seems that what is required is an account of what a symbol is supposed to be—or what it is supposed to be for. One leading suggestion in this regard, representing a general approach known as teleological semantics, is that symbols and representations have an adaptive value, in evolutionary terms, for the organisms that use them and that this value is key to determining their content. A word like *cow*, for example, refers to animals of a certain kind if the beliefs, inferences, and expectations that the word is used to express have an adaptive value for human beings in their dealings with those very animals. Presumably, such beliefs, inferences, and expectations would have little or no adaptive value for human beings in their dealings with hippopotamuses; hence, calling a hippopotamus a cow on a dark night is a mistake—though there would, of course, be a causal connection between the animal and the word in that situation. Both of these approaches, the computational and the teleological, are highly contentious. There is no consensus on the respects in which overt language use may presuppose covert computational processes; nor is there a consensus on the utility of the teleological story, since very little is known about the adaptive value over time of any linguistic expression. The norms governing the application of words to things seem instead to be determined much more by interactions between members of the same linguistic community, acting in the same world, than by a hidden evolutionary process.

Practical and expressive language

In addition to sense and reference, Frege also recognized what he called the *'force'* of an utterance—the quality by virtue of which it counts as an assertion (You wrote the letter), a question (Did you write the letter?), an imperative or command (Write the letter!), or a request (Please write the letter). This and myriad other practical and expressive (nonliteral) aspects of meaning are the subject of pragmatics.

Speech acts

The idea that language is used for many purposes—and that straightforward, literal assertion is only one of them—was a principal theme of Wittgenstein's later work, and it was forcibly stressed by Austin in his posthumously published lectures *How to Do Things with Words* (1962). Austin distinguished between various kinds of *'speech act'*: the *'locutionary'* act of uttering a sentence, the *'illocutionary'* act performed in or by the act of uttering, and the *'perlocutionary'* act or effect the act of uttering results in. Uttering the sentence *It's cold in here*, for example, may constitute a request or a command for more heat (though the sentence does not have the conventional form of either illocution), and it may cause the hearer to turn the heat up. Austin placed great emphasis on the ways in which illocutionary force is determined by the institutional setting in which an utterance is made; an utterance such as *I name this ship the Queen Elizabeth*, for example, counts as a christening only in a special set of circumstances. Austin's theory of speech acts was considerably extended and refined by his American student John Searle (born 1932) and others.

Implicatures

Austin's Oxford colleague H.P. Grice (1913–88) developed a sophisticated theory of how nonliteral aspects of meaning are generated and recovered through the exploitation of general principles of rational cooperation as adapted to conversational contexts. An utterance such as *She got married and raised a family*, for example, would ordinarily convey that she got married before she raised a family. But this *'implicature'*, as Grice called it, is not part of the literal meaning of the utterance (*'what is said'*). It is inferred by the hearer on the basis of his knowledge of what is said and his presumption that the speaker is observing a set of conversational maxims, one of which prescribes that events be mentioned in the temporal order in which they occurred.

The largest and most important class of implicatures consists of those that are generated not by observing the maxims but by openly and obviously violating them. For example, if the author of a letter ostensibly recommending an applicant for a job says only that Mr. Jones is very punctual and his penmanship is excellent, he thereby flouts the maxim enjoining the speaker (or author) to be as informative as necessary; he may also flout the maxim enjoining relevance. Since both the author and the reader know that more information is wanted and that the author could have provided it, the author implicates that he is prevented from doing so by other considerations, such as politeness. Additionally, therefore, he implicates that the applicant is not qualified for the job.

Metaphor and other figures

Related studies in pragmatics concern the nature of metaphor and other figurative language. Indeed, metaphor is of particular interest to philosophers, since its relation to literal meaning is quite problematic. Some philosophers and linguists have held that all speech is at bottom metaphorical. Friedrich Nietzsche (1844–1900), for example, claimed that *'literal'* truths are simply metaphors that have become worn out and drained of sensuous force. Furthermore, according to this view, metaphor is not merely the classification of familiar things under novel concepts. It is a reflection of the way human beings directly engage their world, the result of a bare human propensity to see some things as naturally grouped with others or as usefully conceived in comparison with others. It is most importantly not a product of reason or calculation, conscious or otherwise. Evidently, this idea bears strong affinities to Wittgenstein's work on rule following.

Figurative language is crucial to the communication of states of mind other than straightforward belief, as well as to the performance of speech acts other than assertion. Poetry, for example, conveys moods and emotions, and moral language is used more often to cajole or prescribe, or to express esteem or disdain, than simply to state one's ethical beliefs.

In all these activities the representative power of words is subservient to their practical import. Since the mid-20th century these practical and expressive uses of language have received increasing attention in the philosophy of language and a host of other disciplines, reflecting a growing recognition of their important role in the cognitive, emotional, and social lives of human beings.

Simon W. Blackburn

Additional Reading

Introductory works

Helpful introductions to the philosophy of language include William Lycan, *Philosophy of Language* (2000); Michael Devitt and Kim Sterelny, *Language and Reality* (1999); and Simon Blackburn, *Spreading the Word* (1984).

Original texts

Gottlob Frege, *Translations from Philosophical Writings of Gottlob Frege*, ed. by Peter Geach and Max Black (1960), and *The Foundations of Arithmetic: A Logico-Mathematical Enquiry into the Concept of Number*, trans. by J.L. Austin (1959), are representative of Frege's work in the philosophy of language and the philosophy of mathematics, respectively. Bertrand Russell, *Logic and Knowledge: Essays, 1918–1950*, ed. by Robert Charles Marsh (1956), contains Russell's "On Denoting." The later development of semantics is covered in Rudolph Carnap, *Introduction to Semantics* (1948). Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*, trans. by D.F. Pears and B.F. McGuinness (1921), and *Philosophical Investigations*, trans. by G.E.M. Anscombe (1953), are his two classic works. Probably the most enduring work of the ordinary language school is J.L. Austin, *How to Do Things with Words* (1962). Austin's method is applied to a number of disparate philosophical problems in his *Philosophical Papers*, ed. by J.O. Urmson and G.J. Warnock (1961). Formal approaches in linguistics proceed from Noam Chomsky, *Syntactic Structures* (1957). Later developments are discussed in Jerry Fodor, *The Mind Doesn't Work that Way* (2000). A well-known Chomskyan and evolutionary approach is Stephen Pinker, *The Language Instinct* (1994). Serious problems with the notion of meaning are explored in W.V.O. Quine, *Word and Object* (1960). The attempt to anchor at least some kinds of meaning in causal relations between words and things owes much to Saul Kripke, *Naming and Necessity* (1980). Later developments are covered in the difficult papers collected in Donald Davidson, *Inquiries into Truth and Interpretation* (1984). Problems in the theory of interpretation are examined from a Continental perspective in Hans-Georg Gadamer, *Truth and Method*, trans. by J. Weisenheimer and D.G. Marshall (1989).

Anthologies

Some readers may prefer to consult anthologies, which frequently include helpful editorial introductions. They include Peter Ludlow (ed.), *Readings in the Philosophy of Language* (1997); A.P. Martinich (ed.), *The Philosophy of Language*, 2nd ed. (1990); and Andrea Nye (ed.), *Philosophy of Language: The Big Questions* (1998), which contains useful contributions from Continental and feminist traditions. A collection concentrating on semantics and the work of Tarski and others is Simon Blackburn and Keith Simmons (eds.), *Truth* (1999).