

is morally retrograde. Monotheism tends naturally toward zeal and intolerance, encourages debasing, "monkish virtues," and proves itself a danger to society: it is a source of violence and a cause of immorality. In contrast, polytheism, which Hume here regards as a form of atheism, is tolerant of diversity and encourages genuine virtues that improve humankind. From a moral point of view, at least this one form of atheism is superior to theism.

See also BUNDLE THEORY, CAUSATION, EMPIRICISM, ETHICS, PHILOSOPHY OF RELIGION, PROBLEM OF INDUCTION, SKEPTICISM.

D.F.N.

humors. See GALEN.

Hu Shih (1891–1962), Chinese philosopher and historian and a famous liberal intellectual in contemporary China. He studied at Columbia University under Dewey, and brought pragmatism to China. He was the Chinese ambassador to the United States during World War II and later headed the Academia Sinica in Taipei. A versatile writer, he helped to initiate the vernacular movement in Chinese literature; published his *Ancient History of Chinese Philosophy* in 1919, the first history of Chinese philosophy written from a modern point of view; and advocated wholesale Westernization or modernization of China. A reformist committed to the democratic ideal, he remained an anti-Communist throughout his life. **See also** CHINESE PHILOSOPHY, LIANG SOU-MING.

S.-h.L.

Husserl, Edmund (1859–1938), German philosopher and founder of phenomenology. Born in Prossnits (now Prostějov in the Czech Republic), he studied science and philosophy at Leipzig, mathematics and philosophy at Berlin, and philosophy and psychology at Vienna and Halle. He taught at Halle (1887–1901), Göttingen (1901–16), and Freiburg (1916–28). Husserl and Frege were the founders of the two major twentieth-century trends. Through his work and his influence on Russell, Wittgenstein, and others, Frege inspired the movement known as analytic philosophy, while Husserl, through his work and his influence on Heidegger, Sartre, Merleau-Ponty, and others, established the movement known as phenomenology.

Husserl began his academic life as a mathematician. He studied at Berlin with Kronecker and Weierstrass and wrote a dissertation in mathematics at Vienna. There, influenced by Brentano, his interests turned toward philoso-

phy and psychology but remained related to mathematics. His habilitation, written at Halle, was a psychological-philosophical study of the concept of number and led to his first book, *The Philosophy of Arithmetic* (1891). Husserl distinguishes between numbers given intuitively and those symbolically intended. The former are given as the objective correlates of acts of counting; when we count things set out before us, we constitute groups, and these groups can be compared with each other as more and less. In this way the first few numbers in the number series can be intuitively presented. Although most numbers are only symbolically intended, their sense as numbers is derived from those that are intuitively given.

During 1890–1900 Husserl expanded his philosophical concerns from mathematics to logic and the general theory of knowledge, and his reflections culminated in his *Logical Investigations* (1900–01). The work is made up of six investigations preceded by a volume of prolegomena. The prolegomena are a sustained and effective critique of *psychologism*, the doctrine that reduces logical entities, such as propositions, universals, and numbers, to mental states or mental activities. Husserl insists on the objectivity of such targets of consciousness and shows the incoherence of reducing them to the activities of mind. The rest of the work examines signs and words, abstraction, parts and wholes, logical grammar, the notion of presentation, and truth and evidence. His earlier distinction between intuitive presentation and symbolic intention is now expanded from our awareness of numbers to the awareness of all sorts of objects of consciousness. The contrast between empty intention and fulfillment or intuition is applied to perceptual objects, and it is also applied to what he calls *categorial objects*: states of affairs, relationships, causal connections, and the like. Husserl claims that we can have an intellectual intuition of such things and he describes this intuition; it occurs when we articulate an object as having certain features or relationships. The formal structure of categorial objects is elegantly related to the grammatical parts of language. As regards simple material objects, Husserl observes that we can intend them either empty or intuitively, but even when they are intuitively given, they retain sides that are absent and only cointended by us, so perception itself is a mixture of empty and filled intentions.

The term 'intentionality' refers to both empty and filled, or signitive and intuitive, intentions. It names the relationship consciousness has

toward things, whether those things are directly given or meant only in their absence. Husserl also shows that the identity of things is given to us when we see that the object we once intended empty is the same as what is actually given to us now. Such identities are given even in perceptual experience, as the various sides and aspects of things continue to present one and the same object, but identities are given even more explicitly in categorial intuition, when we recognize the partial identity between a thing and its features, or when we directly focus on the identity a thing has with itself. These phenomena are described under the general rubric of identity-synthesis.

A weakness in the first edition of *Logical Investigations* was the fact that Husserl remained somewhat Kantian in it and distinguished sharply between the thing as it is given to us and the thing-in-itself; he claimed that in his phenomenology he described only the thing as it is given to us. In the decade 1900–10, through deeper reflection on our experience of time, on memory, and on the nature of philosophical thinking, he overcame this Kantian distinction and claimed that the thing-in-itself can be intuitively given to us as the identity presented in a manifold of appearances. His new position was expressed in *Ideas Pertaining to a Pure Phenomenology and Phenomenological Philosophy* (1913). The book was misinterpreted by many as adopting a traditional idealism, and many thinkers who admired Husserl's earlier work distanced themselves from what he now taught.

Husserl published three more books. *Formal and Transcendental Logic* (1929) was written right after his retirement; *Cartesian Meditations* (1931), which appeared in French translation, was an elaboration of some lectures he gave in Paris. In addition, some earlier manuscripts on the experience of time were assembled by Edith Stein and edited by Heidegger in 1928 as *Lectures on the Phenomenology of Inner Time-Consciousness*. Thus, Husserl published only six books, but he amassed a huge amount of manuscripts, lecture notes, and working papers. He always retained the spirit of a scientist and did his philosophical work in the manner of tentative experiments. Many of his books can be seen as compilations of such experiments rather than as systematic treatises. Because of its exploratory and developmental character, his thinking does not lend itself to doctrinal summary. Husserl was of Jewish ancestry, and after his death his papers were in danger from the Nazi regime; they were covertly taken out of Germany by a Belgian scholar, Herman

Leo Van Breda, who, after World War II, established the Husserl Archives at Louvain. This institution, with centers at Cologne, Freiburg, Paris, and New York, has since supervised the critical edition of many volumes of Husserl's writings in the series *Husserliana*.

Husserl believes that things are presented to us in various ways, and that philosophy should be engaged in precise description of these appearances. It should avoid constructing large-scale theories and defending ideologies. It should analyze, e.g., how visual objects are perceived and how they depend on our cognitive activity of seeing, focusing, moving about, on the correlation of seeing with touching and grasping, and so on. Philosophy should describe the different ways in which such "regions of being" as material objects, living things, other persons, and cultural objects are given, how the past and the present are intended, how speech, numbers, time and space, and our own bodies are given to us, and so on. Husserl carries out many such analyses himself and in all of them distinguishes between the object given and the subjective conscious activity we must perform to let it be given. The phenomenological description of the object is called *noematic analysis* and that of the subjective intentions is called *noetic analysis*. The *noema* is the object as described phenomenologically, the *noesis* is the corresponding mental activity, also as described by phenomenology. The objective and the subjective are correlative but never reducible to one another.

In working out such descriptions we must get to the essential structures of things. We do so not by just generalizing over instances we have experienced, but by a process he calls "free variation" or "imaginative variation." We attempt in our imagination to remove various features from the target of our analysis; the removal of some features would leave the object intact, but the removal of other features would destroy the object; hence, when we come upon the latter we know we have hit on something essential to the thing. The method of imaginative variation thus leads to *eidetic intuition*, the insight that this or that feature belongs to the *eidōs*, the essence, of the thing in question. Eidetic intuition is directed not only toward objects but also toward the various forms of intentionality, as we try to determine the essence of perception, memory, judging, and the like.

Husserl thinks that the eidetic analysis of intentionality and its objects yields apodictic truths, truths that can be seen to be necessary. Examples might be that human beings could not

be without a past and future, and that each material perceptual object has sides and aspects other than those presented at any moment. Husserl admits that the objects of perceptual experience, material things, are not given apodictically to perception because they contain parts that are only emptily intended, but he insists that the phenomenological reflection on perceptual experience, the reflection that yields the statement that perception involves a mixture of empty and filled intentions, can be apodictic: we know apodictically that perception must have a mixture of empty and filled intentions. Husserl did admit in the 1920s that although phenomenological experience and statements could be apodictic, they would never be adequate to what they describe, i.e., further clarifications of what they signify could always be carried out. This would mean, e.g., that we can be apodictically sure that human beings could not be what they are if they did not have a sense of past and future, but what it is to have a past and future always needs deeper clarification.

Husserl has much to say about philosophical thinking. He distinguishes between the "natural attitude," our straightforward involvement with things and the world, and the "phenomenological attitude," the reflective point of view from which we carry out philosophical analysis of the intentions exercised in the natural attitude and the objective correlates of these intentions. When we enter the phenomenological attitude, we put out of action or suspend all the intentions and convictions of the natural attitude; this does not mean that we doubt or negate them, only that we take a distance from them and contemplate their structure. Husserl calls this suspension the phenomenological *epoché*. In our human life we begin, of course, in the natural attitude, and the name for the process by which we move to the phenomenological attitude is called the phenomenological reduction, a "leading back" from natural beliefs to the reflective consideration of intentions and their objects. In the phenomenological attitude we look at the intentions that we normally look through, those that function anonymously in our straightforward involvement with the world. Throughout his career, Husserl essayed various "ways to reduction" or arguments to establish philosophy. At times he tried to model the argument on Descartes's methodical doubt; at times he tried to show that the world-directed sciences need the further supplement of phenomenological reflection if they are to be truly scientific.

One of the special features of the natural atti-

tude is that it simply accepts the world as a background or horizon for all our more particular experiences and beliefs. The world is not a large thing nor is it the sum total of things; it is the horizon or matrix for all particular things and states of affairs. The world as noema is correlated to our world-belief or world-doxa as noesis. In the phenomenological attitude we take a distance even toward our natural being in the world and we describe what it is to have a world. Husserl thinks that this sort of radical reflection and radical questioning is necessary for beginning philosophy and entering into what he calls pure or transcendental phenomenology; so long as we fail to question our world-belief and the world as such, we fail to reach philosophical purity and our analyses will in fact become parts of worldly sciences (such as psychology) and will not be philosophical.

Husserl distinguishes between the apophantic and the ontological domains. The apophantic is the domain of senses and propositions, while the ontological is the domain of things, states of affairs, relations, and the like. Husserl calls "apophantic analytics" the science that examines the formal, logical structures of the apophantic domain and "formal ontology" the science that examines the formal structures of the ontological domain. The movement between focusing on the ontological domain and focusing on the apophantic domain occurs within the natural attitude, but it is described from the phenomenological attitude. This movement establishes the difference between propositions and states of affairs, and it permits scientific verification; science is established in the zigzag motion between focusing on things and focusing on propositions, which are then verified or falsified when they are confirmed or disconfirmed by the way things appear. Evidence is the activity of either having a thing in its direct presence or experiencing the conformity or disconformity between an empty intention and the intuition that is to fulfill it. There are degrees of evidence; things can be given more or less fully and more or less distinctly. *Adequation* occurs when an intuition fully satisfies an empty intention.

Husserl also makes a helpful distinction between the passive, thoughtless repetition of words and the activity of explicit judging, in which we distinctly make judgments on our own. Explicit thinking can itself fall back into passivity or become "sedimented" as people take it for granted and go on to build further thinking upon it. Such sedimented thought must be reactivated and its meanings revived. Passive think-

ing may harbor contradictions and incoherences; the application of formal logic presumes judgments that are distinctly executed.

In our reflective phenomenological analyses we describe various intentional acts, but we also discover the ego as the owner or agent behind these acts. Husserl distinguishes between the *psychological ego*, the ego taken as a part of the world, and the *transcendental ego*, the ego taken as that which has a world and is engaged in truth, and hence to some extent transcends the world. He often comments on the remarkable ambiguity of the ego, which is both a part of the world (as a human being) and yet transcends the world (as a cognitive center that possesses or intends the world). The transcendental ego is not separable from individuals; it is a dimension of every human being. We each have a transcendental ego, since we are all intentional and rational beings. Husserl also devoted much effort to analyzing intersubjectivity and tried to show how other egos and other minds, other centers of conscious and rational awareness, can be presented and intended. The role of the body, the role of speech and other modes of communication, and the fact that we all share things and a world in common are important elements in these analyses.

The transcendental ego, the source of all intentional acts, is constituted through time: it has its own identity, which is different from that of the identity of things or states of affairs. The identity of the ego is built up through the flow of experiences and through memory and anticipation. One of Husserl's major contributions is his analysis of time-consciousness and its relation to the identity of the self, a topic to which he often returns. He distinguishes among the objective time of the world, the inner time of the flow of our experiences (such as acts of perception, judgments, and memories), and a third, still deeper level that he calls "the consciousness of inner time." It is this third, deepest level, the *co-consciousness of inner time*, that permits even our mental acts to be experienced as temporal. This deepest level also provides the ultimate content in which the identity of the ego is constituted. In one way, we achieve our conscious identity through the memories that we store and recall, but these memories themselves have to be stitched together by the deepest level of temporality in order to be recoverable as belonging to one and the same self. Husserl observes that on this deepest level of the consciousness of inner time, we never have a simple atomic present: what we come to as ultimate is a moving form

that has a retention of the immediate past, a protention of that which is coming, and a central core. This form of inner time-consciousness, the form of what Husserl calls "the living present," is prior even to the ego and is a kind of apex reached by his philosophical analysis.

One of the important themes that Husserl developed in the last decade of his work is that of the life-world or *Lebenswelt*. He claims that scientific and mathematical abstraction has roots in the prescientific world, the world in which we live. This world has its own structures of appearance, identification, evidence, and truth, and the scientific world is established on its basis. One of the tasks of phenomenology is to show how the idealized entities of science draw their sense from the life-world. Husserl claims, e.g., that geometrical forms have their roots in the activity of measuring and in the idealization of the volumes, surfaces, edges, and intersections we experience in the life-world. The sense of the scientific world and its entities should not be placed in opposition to the life-world, but should be shown, by phenomenological analysis, to be a development of appearances found in it. In addition, the structures and evidences of the life-world itself must be philosophically described.

Husserl's influence in philosophy has been very great during the entire twentieth century, especially in Continental Europe. His concept of intentionality is understood as a way of overcoming the Cartesian dualism between mind and world, and his study of signs, formal systems, and parts and wholes has been valuable in structuralism and literary theory. His concept of the life-world has been used as a way of integrating science with wider forms of human activity, and his concepts of time and personal identity have been useful in psychoanalytic theory and existentialism. He has inspired work in the social sciences and recently his ideas have proved helpful to scholars in cognitive science and artificial intelligence.

See also BRENTANO, INTENTIONALITY, KANT, PHENOMENOLOGY. R.So.

Hutcheson, Francis (1694–1746), Scottish philosopher who was the chief exponent of the early modern moral sense theory and of a similar theory postulating a sense of beauty. He was born in Drumalig, Ireland, and completed his theological training in 1717 at the University of Glasgow, where he later taught moral philosophy. He was a Presbyterian minister and founded an academy for Presbyterian youth in Dublin.

Sparked by Hobbes's thesis, in *Leviathan*