1

The Original Debate

The sciences concerned with the study of the human realm have continuously struggled with the question of appropriate methods for dealing with their subject matter. The question has invariably been framed in some kind of relationship to the methods developed by the physical sciences, mainly because the methodical study of the natural order preceded the methodical study of the human order. Rarely has the relationship been reversed; rarely has anyone asked whether the physical sciences might use the special methods developed by the human sciences.

The traditional debate remains essentially this: Should the human sciences emulate the methods of the natural sciences or should they develop their own methods? The advocates of special methods base their argument on the premise that human beings are different in kind from the objects of study in the physical world and that they therefore require different methods. On the opposite side of the debate are those who hold that the methods of the natural sciences will work for all of the sciences. It is in this conceptual framework that the debate was formed nearly a century ago, and it is in this same framework that it continues.

I believe that the structure of this old debate has ceased to produce useful discourse. In recent decades, investigations in the philosophy of science, along with the development of alternative systems of inquiry, have brought about vast changes in our understanding of the nature of the scientific enterprise. The context in which the debate is carried on has changed since it began. The debate, I believe, should be refocused, so that emphasis is placed on these recent developments. By this means, methodology can move beyond the sterility of the debate itself; it can stimulate us and bring about new conceptions of how we know and understand the human realm.

It is important, nevertheless, to understand the original debate and to trace its development, for it continues to influence all discussions of methodology in the human sciences, and often its form, as well as its substance, emerges in what are said to be "revised" formats.

Positivism

The movement toward empirical investigation, begun by the crafts guilds during the Middle Ages, gradually accelerated, and it eventually burst forth as a "great awakening" during the late Renaissance period and the Baroque era. Francis Bacon's *Novum Organum* of 1620 championed the inductive-experimental method as a replacement for Aristotle's methods, which, Bacon said, had not overcome the "idols" which obscure our understanding.[1] In 1632, Galileo published *The Dialogue Concerning Two Chief World Systems*, in which he held, as had the Greeks before him, that nature is consistent in its operations and is not random. Because of this consistency, Galileo said, it can be seen that nature varies in a systematic way, and it is possible to discover and describe nature's patterns by using mathematical formulas. But he excluded the teleological explanations that has been part of Aristotle's scheme; according to Galileo, we need not suppose that variation in nature takes place so that some purpose is accomplished.[2] Newton's *Mathematical Principles of Natural Philosophy* (1687) stressed the need for experimental confirmation of theses about the order of nature. According to Newton, such an approach not only proved fruitful for advances in medicine and for solving problems of technological production, but also for a general understanding of the natural world.[3]

This "great awakening" in the natural sciences was paralleled some two centuries later by the burgeoning of a systematic study of human phenomena, particularly history, languages, and social institutions. Before the nineteenth century, answers to questions about human beings were sought from the Bible, from the church, and from philosophers. The scholarly examination of evidence as a method for answering questions about the human realm is thus a recent development in human history.[4]

Thomas Hobbes was the first to comprehend and express the view that humans could be studied with the new methods of science. Hobbes visited Galileo in 1637, and using Galileo's notion that the cause of everything was merely a variation of matter in motion, he wrote in the *Little Treatise* that human sensation could also be ex-

plained as variations of motion. According to Hobbes, thinking, in all its forms, is an activity, and thinking is therefore a kind of motion. Mind is simply the name for the sum of a person's thinking activities; it is thus nothing but a series of motions in an animal organism. Consciousness, or mind, can be studied in the same way that any object in motion is studied. Hobbes composed a series of objections to Descartes's *Meditations* which were included in its publication in 1641. Hobbes objected to Descartes's separation of mind and matter; instead he proposed that mind is part of nature and need not be seen as a second basic substance. Hobbes ended up with one universe made up of matter in regular motions—motions that could be described by mathematical formulas. In Hobbes's view, there was no need for a separate study of human phenomena because they are, in principle, no different from any other phenomena.[5]

Closer to the contemporary period, Auguste Comte, writing between 1830 and 1850, proposed that the study of human phenomena be brought into conformity with the methods used in the natural sciences. All fictitious or "negative" philosophical speculation about the human realm, he said, should be given up, and instead, the "positive" or scientific study of human beings should be undertaken. Through such scientific approaches, a new order of society could be developed that would alleviate the suffering and chaos caused by social systems built upon the speculative ideas of philosophers. In Comte's description of the evolution of the human mind, it passed through three stages. The first was a theological stage: humans were held under the spell of supernatural beings, and the world was explained in terms of the will of anthropomorphic gods and spirits. The second was a metaphysical stage: conceptual abstractions were substituted for animistic beings, but these abstract concepts were merely fictional inventions and wishful projections. The third, which, according to Comte, was about to emerge, was a stage of positive knowledge: the inventions of the earlier stages would be rejected, and it would be recognized that the only truth is knowledge of the necessary regularities of phenomena. Within the third stage—the stage of knowledge—there would exist a hierarchy of sciences that would recognize the "positive" conception of truth. The highest of the sciences would be "sociology," which would discover the laws—the regularities—of social behavior. Human beings would then be able to establish a perfect society based on these laws of behavior.[6]

John Stuart Mill's *System of Logic* (1843) provided a firm philosophical and logical foundation for empiricism as the ground of knowledge. Mill did not propose a society or "sociocracy" based on an absolute and final knowledge (as Comte did), but he did call for

the use of natural science methods in the study of human phenomena, stating that "the backward state of the moral sciences can only be remedied by applying to them the methods of physical science, duly extended and generalized."[7]

A more restricted version of positivism was developed in the late nineteenth century by Richard Avenarius and Ernst Mach. Avenarius's ideas were developed in the 1870s, although his most influential work was published from 1888 to 1890. This was the two-volume *Critique of Pure Experience*, in which he presented his system of "empiriocriticism," an epistemological theory according to which the task of philosophy is to develop a "natural concept of the world" based on "pure experience." Avenarius believed that "pure experience" must be recognized as the sole admissible source of knowledge. He proposed that we eliminate all the metaphysical ingredients that we import into experience through introjection. This could be done, he said, by attending only to that which is directly given by pure perception, "the sensa."

Mach also proposed that knowledge be limited to sensations. In *The Analysis of Sensations* (1886), he held that the world we encounter in casual observation as a complex and unorganized flux contains, on close inspection, objects with common qualities. However much the objects may differ from one another, they are made up of the same colors, textures, shapes, sounds, and so forth. Similarly, when we analyze experience, we find in it elements that are accessible to one or another of the five senses. Mach argued that the most accurate and economical description of the natural world can be stated in terms of these basic elements. By limiting science to a description of these elements, he said, possible error can be avoided. For example, two people are asked to describe what they experience when they look at a particular object and one person calls the object "chair," while the other calls it "stool." According to Mach, the distinction between "chair" and "stool" does not exist in the basic experiences of the perceiving persons; it exists in what persons infer about the object based on the elements of sensation. If the two people were to be asked to describe the sensations they have, they would give the same report—that is, they would describe the object as "a white, round plane with four rectangular legs attached." For Mach, "the world consists only of our sensations." It is only sensation that is certain and indubitable, and thus a science built on sensation has a foundation of certainty.

The positivist tradition might also be called a single-method tradition. Its primary themes can be summed up in three statements: (1) All metaphysics should be rejected and knowledge confined to

what has been experienced or can be experienced. Thus science should restrict itself to discovering reliable correlations within experience. (2) The adequacy of knowledge increases as it approximates the forms of explanation which have been achieved by the most advanced sciences. (3) Scientific explanation is limited to only functional and directional laws (Comte) or to only mathematically functional laws (Mach).

There is a strong reformist flavor to the positivist movement; its members preached a gospel of good news in which all human problems would finally be solved by applying the one correct method. Traditional beliefs and practices were to be cast aside and replaced by prescriptions developed by applying to human problems the methods that had succeeded in uncovering the secrets of the natural world. All metaphysical ideas should be exorcised since they were not merely wrong—they stood in the way of progress. Positivist methodology was ultimately supposed to guarantee progress through technical means applied to the social realm.

Mill and Comte were only exemplars of a general movement. Other elements entered into and influenced the use of the natural science approach for the study of the human realm. Beginning in the 1860s, a loose combination of naturalism, empiricism, and positivism was adopted by most researchers concerned with human phenomena as well as by those investigating the natural world.[8] Naturalism held that all phenomena can be explained in terms of natural causes and laws without attributing moral, spiritual, or supernatural significance to them. Empiricism held that experience of the senses is the only source of knowledge. This combination of naturalism, empiricism, and positivism has continued to dominate the methodological framework for the behavioral and social sciences until the present time.

Chapter 2 will trace the continued development of the empirical approach, carrying it through its logical-empirical period and bringing it to the beginnings of its breakdown with the discovery of quantum physics at the beginning of the twentieth century and with changes in the philosophy of science during the 1960s. Meanwhile, however, recent texts in research methods continue to promote the naturalism-empiricism-positivism tradition. For instance, as recently as 1979 Kerlinger has written:

> The general approach to knowledge and understanding of physics and psychology is the same, but the details of theory and investigation are quite different. . . . To measure aspects of human behavior . . . is usually more difficult than to measure properties of physical bodies.[9]

The next section of this chapter will describe the early anti-positivist formulations of methodology for human science.

The Anti-Positivist Response

In the last decades of the 1800s it had not yet been decided which methodological principles would be used for the newly developing studies of the human realm. The previous section outlined the position that these new studies should use the principles which had proved so successful in studies of the physical realm. This section will present an outline of six thinkers who represent the alternative position. In common they held a position that the methodology of the natural sciences was inadequate for studying human phenomena. They had considerable differences among themselves as to the nature of the human realm and how it ought to be studied; yet they believed that these studies should address the fullness of human experience, including values and meaning in addition to perception. The struggle to understand and define the human realm shows through in their writings. They attempted in various ways to define the human realm as a prelude to establishing ongoing research programs. However, their anti-positivist position did not carry the day, and the sciences of the human realm ended up with a methodology grounded in the procedures and logic of the physical sciences.

The early anti-positivist attempts to define the human realm and to answer how access to it could be gained and what kind of procedures and logics were appropriate, are a fertile field for a renewed debate about human science methodology. Giambattista Vico was an early eighteenth-century forerunner of the debate. The focus of the anti-positivist exposition was carried on in Germany from 1880 to 1920. The leaders in the endeavor were Wilhelm Dilthey, Wilhelm Wundt, Franz Brentano, Edmund Husserl, Max Weber, and, in the United States, William James. Each approached various problems inherent in constructing a human science and focused on particular issues.

As early as 1725, however, Vico anticipated the growth of the empirical approach to human phenomena. In *The New Science*, Vico resisted the trend by asserting that we can gain a true knowledge of human phenomena through the study of our history. We can understand history, he said, because we have made it ourselves:

> The whole world of culture has, for certain, been produced by the physical and mental activity of man, and for this reason one can, and,

> in fact, has to, find its principles and regularities within the modes of existence of the spirit of the self-same people.[10]

According to Vico, the laws of historical development are laws of the structure of meaning. His call for a science of human society preceded that of the positivists, and it was a call for a study of the forms of social life developed by and created through human meaning. Although his ideas went practically unnoticed at the time, they are significant because they asked for a study of human phenomena freed from theology and metaphysics and because they suggested an alternative approach to the study of human nature (an approach anticipating the structuralism developed much later by Lévi-Strauss). In recent years, Vico's work has become the subject of increasing study and has served, in fact, as a source for ideas about methodological issues in the human sciences.

The main context of the late nineteenth-century anti-positivist response was the idealistic and Romantic legacy of the movements of Herder, Fichte, and Schelling in Germany from earlier in the century. These movements recognized the life experience of humans, the emotional and vital feeling of life, and the engagement that humans have with others and with the world. The new science of humans proposed by the positivists overlooked the very experience of life in favor of the physical and mental regularities that could be caught up in a network of laws. Novel and creative acts, the personal pain of suffering, and the joy of happiness were not the focus of the perspective they advocated.

The anti-positivist response was not unified and did not develop a coherent and systematic alternative to the positivist-inspired approach to the study of human phenomena. There was, however, general agreement in the anti-positivist response that what was wrong with positivism was that it neglected the unique sphere of meaningful experience that was the defining characteristic of human phenomena. What the anti-positivist response—in its broadest interpretation—was calling attention to was the sphere of reality that exists because of human beings. If human beings did not inhabit the planet, there would be no such constructions as roads and homes, there would be no social institutions, there would be no cultural-belief systems, and there would be no developed systems of conceptual communication through spoken and written words. It appeared that positivism did not appreciate or intend to investigate this "human-added" realm. Although there was agreement among the anti-positivists that the human realm needed to be included in the sciences, no single program of methods for studying this realm gained preeminence.

Neo-Kantian Response

The first person to introduce a dichotomy of method between the physical and human sciences appears to have been the German historian Johann Gustav Droysen. In 1858 he used the terms *erklären* (explanation) to describe physical science methods and *verstehen* (understanding) to describe human science methods. According to Droysen's plan, the physical sciences were to explain phenomena by uncovering necessary and predictive laws, while the human sciences were to provide an understanding of human experience. The difference between the two approaches is a difference between kinds of knowledge. For example, through the physical sciences we can come to know that a rock falls because of the law of gravity, while through the human sciences we can come to know the meaning that someone is trying to communicate to us.[11]

The anti-positivist response drew on the distinction that Kant had made between theoretical and practical reason. For Kant, theoretical reason was concerned with the knowledge of appearances—with the realm of nature—and practical reason was concerned with moral decisions. Kant asserted that human history was a part of nature, and he did not accept a distinction between the human sciences and the natural sciences. The neo-Kantians of the late nineteenth century, however, thought that cultural phenomena, as expressions of meaning, needed to be comprehended apart from events in nature. Moreover, the realm created by human action—the cultural realm—needed to be comprehended with a kind of reason akin to Kant's practical reason. Cultural phenomena required *verstehen*, a mode of understanding which the neo-Kantians considered a legitimate source of knowledge. The positivists were opposed to the use of the *verstehen* mode on the ground that different interpreters could come to different understandings of the same phenomena. Understanding was said by the positivists to be merely speculative and therefore open to challenge; they attacked it for lacking certainty and refused to include it in science (*epistēmē*).

A leading center of the neo-Kantian opposition to Mill's "logic of the moral sciences" was the so-called Southwest German (or Baden) school, which placed extreme stress on the activity of the mind in knowledge and on the priority of value. Wilhelm Windelband and Heinrich Rickert, the leaders of this school, held that there was a fundamental difference between the natural sciences and the studies of history, jurisprudence, and economics. However, they proposed that there were not two realms, a human and a physical, but one realm that could be approached from two perspectives.

Windelband, in an address called "History and Natural Science" given in 1894, coined the labels "nomothetic" (*nomos* means "law") and "idiographic" (*idio* means "personal," "particular," or "distinct") to distinguish between the natural science and historical science approaches to phenomena. Windelband argued that the natural science approach aims at the construction of physical causality and "explanation" (Droysen's *erklären*) of events by identifying them as instances of a general law. The historical science approach, by contrast, is individualizing; it concentrates on the uniqueness of the event and attempts to identify its meaning and specific characteristics. Windelband believed that any given event could be studied by either kind of science. A mental event viewed from the perspective of physical causality—as an instance of the working of some general law—could be explained as a natural event. But that same mental event, described in its individuality and valued for its deviation from the class or form to which it belonged, became an object approached from the idiographic perspective. The human sciences were not, then, distinguished by attending to a different realm, but by using the idiographic method. The use of this method allowed certain unique and human characteristics to be understood.[12]

Rickert was the most influential member of the Southwest school. He, too, believed that the difference between the human and natural sciences was the perspective each took, rather than that they studied different realms. In *Culture Science and Natural Science* (1889), he stated that "reality becomes nature if we consider it in regard to what is general; it becomes history if we consider it in regard to the particular or individual."[13] Rickert rejected Dilthey's term *human science* and substituted for it the term *culture science* (*Kulturwissenschaft*). Dilthey proposed that the object of study was the "lifeworld," or experience. Rickert believed that this proposal emphasized the study of individual experience to the detriment of the study of cultural products and institutions. It is these and their meanings that the sciences of human phenomena should seek to understand, not inner experience. When the originally "immeasurable manifold" is viewed from the perspective of understanding concrete individual cases that are suffused with meaning, rather than abstract generalized laws, the cultural sciences result.

It was Rickert's position that meaning cannot be understood except in terms of values. Values are what provide the meaning of individual events. Culture science should attend to understanding values, and this is done by looking at their historical manifestations. Values are not psychic or mental phenomena; instead, they are universal and ahistorical standards. Although they are never actualized in history,

they can be studied by looking at how they are approached by various cultures. Rickert approached the position that culture science should focus on the transcendent realm of values and how they are manifested in human actions. Such an approach was opposed by Dilthey, who believed that values were contingent and subject to change and historical development.

Georg Simmel, although included among the neo-Kantians, was not part of the Southwest school. He lived most of his life in Berlin, where his major works were written between 1892 and 1908. Simmel proposed a theory of the origin of human society. He believed that concrete social phenomena could be traced back to the modes of individual behavior and that the particular form of such modes should be understood through detailed description. Simmel represented the position that social forms were dependent upon individual needs, in opposition to the idea that these forms had a reality of their own. His key concept was that of reciprocal effect. This notion holds that the drives of individuals—such as hunger or love—make up the *content* of social life. On the other hand, reciprocal effects between individuals such as competition, domination, cooperation, and solidarity are the *actualizing forms* of social life. His distinction between content and actualizing forms provided a way to understand how experience is constructed. In experiences, the objects of the world are constituted in different forms; for example, a painting can be experienced as beautiful and simultaneously can be revered as an object of worship. Simmel focused on the structuring activity of the agent in producing what is experienced.[14]

These three are representatives of the ideological context in which an anti-positivistic human science was undertaken in Germany. We shall turn now to six advocates of a methodology for human science that could rigorously study the fullness of the human realm.

Wilhelm Dilthey (1833–1911)

Wilhelm Dilthey was the principal architect of the anti-positivist movement in human science. He agreed with the positivist position that the only real knowledge is rigorous scientific knowledge, and he believed that the claims for speculative knowledge, intuitive knowledge, poetic knowledge, and knowledge of faith were riddled with contradictions. He also appreciated Mill's emphasis on the need for an empirical base for true knowledge. His argument with the positivists was not over their concern to build a knowledge freed from the traditional sources of revelation and pure reason, but over the question of what is the appropriate empirical science for the

study of human phenomena. It was Dilthey's particular appreciation for the wealth and variety of human life that informed his understanding of the limitations of a merely explanatory model of science for the study of human beings.

Dilthey's explication of a methodology for the human sciences must be viewed within the context of his "philosophy of life." Life, he said, cannot be understood as a machine, as Hobbes had suggested. Neither can it be explained merely as an organic system shared with other life forms, because human life is something far more than organic metabolism and mechanical movement. For Dilthey, life is what we experience in our activities and reflections as we live out our personal histories. He did not believe that human life could be understood by using the explanatory model that classifies events according to the laws of nature:

> The expression "life" denotes what is to everyone the most familiar and intimate, but at the same time the darkest and even most imponderable. . . . One can describe it. One can elucidate its peculiar and characteristic traits. One can, as it were, inquire after its tone, rhythm, and melody. But one cannot analyze it totally into all its factors, for it is not totally resolvable in this manner. What it is cannot be expressed in a simple formula or explanation. Thought cannot fully go behind life, for it is the expression of life.[15]

The accumulation of the innumerable lives of individuals makes up the historical and social reality of humankind. For Dilthey, it was an empirical fact that the individual stands in a complex texture of relationships with others. "The individual life is part of life as a whole."[16] The individual life is not an isolated monad; it is merged and integrated into levels of intensity with various group lives, including the group life of humankind. And because individuals do not exist in isolation, Dilthey said, they cannot be studied as isolated units; they need to be understood in the context of their connections to cultural and social life.

The object of inquiry for the human sciences, then, includes not only the hopes and fears and thoughts and acts of individuals, but also the institutions that have emerged out of life activity, which, in turn, provide part of the context in which individual experience is formed. Other expressions of human life must also be included—for instance, the laws that guide conduct, the religions that are believed in, the creations that organize and give meaning to experience, such as art, literature, and philosophy. The activity of science—even science that studies inanimate nature—is an expression of life, and as such it must be included in the subject matter of

human science. Human science takes as its field of study all of human life and all of life's expressions. Its goal is to understand the order that underlies the process of human existence, an order that provides the form for experience.

Dilthey's "philosophy of life" proposes that the only proper focus for human science is the concrete life—the experience—of historical agents and their actions. Dilthey dismissed two alternative focal points as inadequate. The first of these was transcendentalism in any form. He did not believe that there is any ultimate reality "behind" life, such as, for example, Kant's thing-in-itself or Rickert's universal values. There is no point outside of life on which a knower can stand to observe, he said, and thus knowledge of life is an activity of life itself focused on itself. There are no transcendent, absolute standards of truth that can be utilized as grounds of certainty, and thus the study of life is an activity of particular individuals living at a particular time in a particular place. Human scientists are influenced by their circumstances, by their cultural traditions and cognitive structures, by their social environment, and by the horizons of their historical setting. Therefore all knowledge developed by life reflecting on itself is tinged with relativity.

The second focal point dismissed by Dilthey was the empirical view that we "experience" only sensations and impressions, such as, say, green patches of color. Such descriptions of experience, he said, are abstractions from the fullness of the experience that makes up our life-world. Ordinarily, experience consists of concrete things—for example, people we recognize and feel something toward, a painting we see as beautiful, objects which appear as useful. And it is this experience, which is part of our everyday lives, that must be the source of material for the human sciences. Knowledge begins with this experience, Dilthey asserted, and in his view empiricists and positivists were mistaken in their belief that knowledge begins with such things as blobs of color and twinges of pain. He accused the positivists of metaphysical dogmatism for insisting that knowledge must be sought in "pure sensation," itself an abstraction resulting from a particular analytic attitude taken toward the life-world in its richness.

Categories of life. The task of the human sciences, as Dilthey saw it, was to examine the life experience both in its individual manifestations and in its social expressions. Life experience, he maintained, is not a mass of random and disconnected experience; we do not experience a buzz of impressions. Experience is already organized as it appears; it makes sense, and it is understandable. And it is already full of meaning. What human scientists must seek

to make explicit, then, are the principles of organization. Dilthey called these principles "categories of life." They are the processes by means of which experience appears as related and meaningful. The goal of human science is to explicate these processes, not to seek causal connections. This explication would result from the use of a kind of reason different from the reason used to establish the laws of nature. Dilthey called this reason "historical reason" to distinguish it from "pure reason," which Kant used for the study of nature.

Dilthey believed that his own task was to develop a critique of historical reason that would stand in contrast to Kant's critique of pure reason. Kant sought to understand how it is that we experience physical reality. He attempted to describe the mental processes that organize our sensations into our experiences of an ordered, connected world of objects in space and time, and he named the principles of this mental ordering process "categories." Dilthey extended Kant's approach: whereas Kant undertook to order the experience of the physical world, Dilthey undertook to order the whole of the life experience.

Dilthey wanted to produce a list of categories of life, those principles by means of which we organize experience, but his approach to recognizing the categories differed from Kant's approach. According to Kant, the categories exist a priori—that is, they exist before any experience is acquired, and thus they are not learned—and no experience is available that has not already been organized through the activity of the categories. Using a somewhat mechanistic metaphor, we might say that a person's brain is prewired, so that it operates on any data that come into the system according to the patterns already wired into the brain. Kant's concept was just the opposite of Hume's empirical concept. Hume held that all organization of experience is the result of previous experience and that there are no pregiven organizational patterns; instead, these patterns are built up through the association of various experiences. The position that Dilthey took in regard to his categories of life is closer to Hume's position than to Kant's. Dilthey did not believe that the categories are a priori; in his view, they can vary, depending upon the historical setting and the individual experiences.

Dilthey's method for uncovering the patterns uses empirical generalization. Examining the life experience itself, the researcher notices forms and relationships shaping the way in which the experience is meaningful. Some of the patterns Dilthey discussed are the relationships of self and world; power; part and whole; means and ends; and development. The pattern of self and world is at the base

of symbolism, and it organizes the relationship between objects and meaning—for example, between frown and anger or between a combination of alphabet letters and concepts. The pattern of power organizes experience so that we are aware of our impact on things and their effect on us; it is at the base of our planning activities, and it corresponds to causality in the physical world.

The categories of life operate primarily at a level underlying conscious awareness and deliberation. For example, usually we do not notice a person's turned-down lips and consciously infer from them that the person is angry; instead, we experience an angry person. These patterns can be used consciously, however, when an appearance is confusing and may at first seem meaningless. In such an instance, we can try to understand an experience and make sense of it. Dilthey believed that religions, myths, proverbs, and works of art are all constructions of meaning that provide order in experience and that social understanding, legal codes, and written constitutions are all manifestations of the ordering process, providing contexts in which present actions and future plans are made meaningful.

Moreover, the categories of life are part of a researcher's own experience. The human scientist is a human being who is affected, like everyone else, by the circumstances of his setting. Dilthey saw this as an advantage, not as a disadvantage to be overcome, because a researcher gives meaning to his own experience through the organizing processes. These processes, then, are not abstract, as are relationships in the physical realm; they are experienced by the researcher and are part of his own interpretation of life. The processes themselves are used in the researcher's activity to gain knowledge.

In Dilthey's scheme, there are levels of organizing processes. At the most comprehensive level, there are those processes that provide an overall integrative interpretation or world view. The world view of a culture can be defined as that which provides the basic assumptions and the total attitude of life. It is the meaning environment that envelopes individuals; it presents the conceptual and interpretive organizing patterns that individuals integrate into their own meaning-creating process. Dilthey discerned three basic types of world views: naturalism (positivism), subjective idealism (the idealism of freedom as exemplified by Kant), and objective idealism (as exemplified by Hegel). For Dilthey a world view is coherent and stabilizing, but it is not self-enclosed or static, for it is attended by an "inner dialectic" that forces the revision of premises and brings about changes in the meaning network.

When Dilthey emphasized that the task of human science is to make explicit the organizing themes that render experience meaningful, he was seeking to describe the structural coherence that gives meaning to experience. As a goal for human science, description of structure differs broadly from the goals of Mill's science. Mill sought to trace the causal genesis and to state the laws of explanation, while Dilthey looked to human science to uncover the structures of meaning. These structures are not independent of life; they are handed down to individuals through the cultures into which the individuals are born. The structures do adapt and change over periods of time, however. The sources for the human scientist who is uncovering these organizing processes are literature, religious practices, everyday assumptions about nature and people, artistic works, and any other expressions of life. Because researchers express their own life-worlds and local organizing themes in their attempts to understand, they are unable to achieve a purity of knowledge that is freed from situatedness in various life contexts. But if researchers were to base their findings merely on the life within and around them, they would become parochial. Such a limited data base would make it possible for researchers to mistake their own organizing principles or categories for the whole.

For Dilthey, the understanding and recognition of categories required the broadest possible context and the deepest possible investigation of life's manifestations. Limiting the search for categories to a particular disciplinary perspective or historical period would, he felt, miss the interactive aspect of the categories. Human science research needs to address life in all of its manifestations. It needs to examine human actions and expressions; it needs to examine the developing and historically changing life patterns; it needs to examine the patterns of social organization. In short, it needs to address the intersection of life patterns and the individual's interpretive efforts toward meaning-giving. Synchronically, life appears multi-tiered; diachronically, it appears slow-changing.

Verstehen. The positivists had declared that knowledge should be derived from perception. This position implied that what we perceive is the manifestation of physical objects, transmitted by the sensory apparatus into consciousness. Knowledge, in the positivist view, should be limited to what can be implied from this one type of experience. Dilthey emphasized his belief that there is another type of "perceptual" experience and that human science must use it. In addition to recognizing physical objects, Dilthey said, we also recognize meaning. When people communicate to us through books, we experience more than the visual sensation created by black marks on white

paper; we also perceive the meanings of the words and the message of the author. When we perceive physical objects, we see more than those objects; we "perceive" or understand (*verstehen*) meaning in the world. Dilthey held that this second type of experience needs to be included as part of the repertoire of human science and that it ought to be recognized as a legitimate means for acquiring knowledge.

Because of his belief in its importance, Dilthey tried to analyze this type of experience, much in the same way that the positivists had tried to analyze the perceptual experience of physical objects. According to Dilthey, the cognitive process of understanding (*verstehen*) is focused on expressions of life, rather than on physical objects. One does not "understand" a garbage can. The choice of the *verstehen* mode of cognition is appropriate only for studying the objects investigated by the human sciences. The objects studied by the physical sciences are not expressions of life—that is, they do not order and give meaning to their experience.

Dilthey described three conditions which make it possible to understand (*verstehen*) another's meaning: (1) One needs to be familiar with the mental processes through which meaning is experienced and conveyed. Since each person is involved in trying to communicate meaning to others, everyone is familiar with these processes to some extent, but researchers can enlarge this familiarity through the study of biographies and descriptive psychology. (2) One needs a knowledge of the particular concrete context in which an expression is made. A word is understood in the context of its sentence; an action is understood in the context of its situation. (3) One needs a knowledge of the social and cultural systems that provide the meaning for most expressions. To understand a sentence, we need to know the language; to understand a chess move, we need to know the rules of chess.

The human science researcher uses *verstehen* in addition to other modes of cognition. Starting with experience as it is given and including its meaningfulness, the researcher uses all of the tools of knowledge available as he or she seeks to describe, as accurately as possible, the organizing patterns by means of which the experience appears with the particular sense that it has. These tools—all of which are necessary—include observation, logical reasoning, comparison, classification, abstraction, hypothesis framing and testing, and analysis by means of statistical techniques. But along with information obtained with these methods, the human scientist must also take into consideration the information that is developed by the use of *verstehen*. Dilthey emphasized the interdependence of the

kinds of knowledge required to understand the full, concrete experience of life.

Human science studies the manifestations of life in order to identify the patterns of organization that are operative in giving form to the manifestations. Manifestations of life appear in an individual's experience and in the productions of that experience. Access to one's own experience requires introspection—that is, examination of one's own consciousness. Dilthey came to have reservations, however, about the use of introspection as a useful means for gaining access to the organizing principles of life experience. In the process of introspection, he said, we interfere with the very life experience we seek to understand. Because of this fact, he rejected this method as an acceptable base upon which to build a human science:

> The concrete content of these structural relations [the life categories or organizing patterns] is not provided in the observation of the self, but rather in the understanding of expression, that is, mental creation.[17]

Because of what he saw as the limits of introspection, Dilthey turned to the expressions of life for a source in which to study the life categories. The expressions of life are, for example, the words or gestures produced by a person or the texts in which the words are written. As he worked with written expressions of life, Dilthey made use of the techniques that had been developed in hermeneutic studies. Biblical, legal, and classical scholars had developed methods for interpreting and understanding the meanings of the texts they were studying, and Schleiermacher had recently enlarged the scope of hermeneutics by claiming that traditional interpretive techniques could be used to understand the meaning of any kind of text. Dilthey expanded this possibility. If the techniques of hermeneutics could be used for the systematic interpretation of written texts, he asked, why could they not be used to interpret spoken words? Speeches, conversations, and interview responses might thus be systematically interpreted. Moreover, if spoken expressions could be interpreted, then why not nonverbal expressions, such as facial expressions, gestures, and actions? (This subject will be taken up again in chapter 7, where the specific techniques of the contemporary hermeneutic approach will be described in detail.)

Dilthey continued to influence the "search for a method" in the behavioral and social sciences. He functioned more as a stimulator

of the debate, however, than as a creator of a consistent and complete system for the human sciences. He reminded the debaters that an integrative position, instead of an extreme position, would be the most appropriate for a fruitful human science.

H. P. Rickman has listed nine of Dilthey's ideas about psychology, and these ideas hold for all of the various disciplines within human science; I enumerate them by way of summary of Dilthey's contribution to the debate. (1) Humans are embodied and social beings, and therefore a balance should be maintained between studies of the physiological bases of behavior and experience and studies of the structures of the life experience. (2) The life experience is a structural whole that affects and modifies its various parts. (3) The life experience expresses itself in various ways, including facial expressions, gestures, postures, actions, spoken and written languages, and artistic expressions. (4) The most substantial sources of knowledge about the life experience are the expressions of life—for example, the pictures painted, the letters written, the poems and stories composed, and the institutions created. (5) The life categories that give coherence to a person's expression of life are not necessarily explicitly present to this person's awareness at the time the expression is produced. (6) Since humans are psychosocial beings, they cannot understand life in isolation; they understand it only in the context of the social relations and cultural influences that intersect at particular times and places. (7) Life is historical, and as individuals manifest life, it changes. Consequently, an unchanging human nature cannot be assumed. The structures of meaning evolve in a one-way process, so that they are different in various historical periods. (8) Life is found at the level of meaningful experience. If human science concentrates on a lower level, with less complex and more easily isolated phenomena (such as sensations, instincts, and reflexes), then the very subject matter of the human sciences—life itself—will be missed. (9) In addition to explanations in which individual events are subsumed under laws usually causal in nature, human science needs "detailed, searching description of complex, mental phenomena and human behavior."[18]

Dilthey's student, Eduard Spranger (1882–1963), carried forward the anti-positivist understanding of the human sciences by extending Dilthey's argument and method (with Hegelian overtones) into psychology and personality theory. Spranger's chief work is *Die Lebensformen* (*Life Forms*) (1914), translated into English as *Types of Man* in 1928 by W. Pigors.

Wilhelm Wundt (1832–1920)

Wilhelm Wundt has been recognized as the father of psychology. The founding of his Psychological Institute in Leipzig in 1879 is held to mark the beginning of psychology as a science distinct from philosophy. His own distinction between physiological psychology and folk psychology (*Völkerpsychologie*) illustrates the struggle within the human sciences to establish the kind of discipline that psychology was to become. The first was Wundt's model of a psychology that would be entirely a physical science, while the second model would have only one foot in the physical sciences. Edwin G. Boring's *History of Experimental Psychology*, the classic text of the history of psychology, is written from the perspective of the first model and does not give full treatment to the nonpositivistic parts of Wundt's approach.[19]

Boring identifies the most prominent proponents of the "new" psychology as Oswald Kulpe, Herman Ebbinghaus, and E. B. Titchener. What these men had in common was a commitment to the new positivism associated with Avenarius and Mach. Those who advocated that the new discipline of psychology should follow the Machian outline of science understood that the fundamental tasks of psychology would be observation and description for the purpose of providing the most economical summary of the relationships among the elements of sensation. The earlier positivism of Comte allowed no place for psychology in science, but the revised and restrained positivism of Avenarius and Mach had considerable respect for it. Danziger describes Avenarius and Mach's perspective on psychology:

> [They] rejected the metaphysical dualism of the mental and the physical. As positivists they refused to go beyond what is given in experience; but we do not have two kinds of experience, physical and mental—experience is simply experience. The elements of our experience, however, can be studied from two points of view: We can study relationships among experiences that are independent of the particular biological system to which they belong—in that case we have the basis for physical science—or we can study relationships among experiences that depend on the particular biological system to which they belong—in which case we practice psychology. The difference between psychology and physical science is therefore not an essential difference; there is no reason why psychology should not aspire to a scientific status comparable to that of the physical sciences.[20]

Psychology, however, should give up all mentalistic explanatory concepts. Sensa do not show up a "self" or personal agency, and

thus the investigation of individual experience is of the biological individual, not of the psychic individual.

On the other hand, Wundt himself held that psychology should be the scientific study of immediate experience. This experience, however, is not to be understood as the interaction of biological senses with the world; instead, it is a psychological entity interacting with the environment. Psychology studies all of experience—including subjective elements, such as feelings—directly, as it is given in consciousness and as it develops from the psychological state of the observer. Wundt's German students spoke of his approach as *Ganzheit* or "wholeness" (though not in the sense of "gestalt" or other contemporary uses of the term).

In opposition to the approach of the positivists, Wundt emphasized the role of apperception. For him, apperception refers to the activity of attending to something and integrating and creating the perceptive experience; it stands in opposition to the notion of perception as a passive, receptive occurrence or a reproductive play of associations. Wundt believed that we have control over our minds, that we practice a voluntarism in which we analyze and synthesize and direct our attention where we will, although in accordance with lawful principles. He also took a "centralist" position, claiming that voluntary movement provides the basis for involuntary movement, and not the other way around; according to Wundt, it is a central generative process that causes attention to be given to various phenomena. This, too, was a response to the positivists, who held that such a psychological force, insofar as it is not directly available to sensation, must be rejected.

The positivists called for a study of experience stripped of all subjective elements, including even the projection on the sensa of reference to objects in the world. In direct contrast, Wundt was interested specifically in the subjective elements of experience. He believed that conscious experience and physiological events (independent, biologically related sensa) are so different that they cannot be causally related. For Wundt, experience is a complex mental event resulting from a mental synthesis of elements into a higher unity. By breaking up experience into simple elements, he maintained, the unity created by feeling and will is missed. Wundt designated three areas for psychological investigation: (1) immediate experience, to be studied through experimentation and the use of internal perception; (2) the processes of thought themselves, to be studied through a nonexperimental psycholinguistics which he developed in extensive detail; and (3) the area made up of feelings, affects, and

processes of volition, to be studied through examining the historical development of the human species.

For the study of immediate experience, Wundt distinguished between "self-observation" and "internal perception." (English translations frequently do not retain this distinction; usually both terms are translated as "introspection.") He wanted to avoid the difficulties that would arise from reporting memories of experience—that is, the concept of "retrospection" as developed by Mill in reply to Comte's attack on "introspection"—and so he tried to develop a procedure in which the observation and report of one's experience would follow immediately on the original perception without time for reflection and self-consciousness. Wundt trained observers for the purpose of increasing quick and attentive observation. He also replicated experiences in a laboratory setting, gathering multiple reports of internal perception of the same event, so as to provide a reliable source of data for dependable descriptions of experience. In these experiments, "observers" (Wundt's term) would sit in a darkened room facing a projection screen. For just an instant, a four-by-four matrix of four-letter groups would be flashed on the screen, and the "observers" would immediately report their experiences. Wundt's question was: How many ideas can be presented in consciousness at a given moment? By varying the letters from nonsense combinations to word forms to words whose meanings were connected, he hoped to determine the way experience is apperceived or synthesized into wholes.

Wundt believed that his experimental approach was limited to those mental phenomena that are directly responsive to physical influences. His term for this kind of psychology was "physiological psychology," which was appropriate in this instance because he had borrowed his approach from his original field, physiology. The higher mental processes could not be revealed by this method of experimental "internal perception." Something else was needed in addition to the experimental methods, and this was the study of the products of mental life, Wundt's "folk psychology." The study of language, myths, and customs, he believed, would provide clues to the higher operations of the mind. For example, he held that sentence production begins with a unified idea that one wants to communicate and that it is from this "whole mental configuration" that the sentence is produced. He was also concerned with gesture language, meaning change, and the origins of language in involuntary, expressive sounds. David Leary has summarized Wundt's two approaches:

> According to Wundt experimental psychology and folk psychology differed both in terms of subject matter and in terms of method. They were fundamentally different disciplines, and yet both were valid and necessary to give a rounded understanding of human experience and the psychological processes underlying that experience. There was simply no way . . . that social phenomena such as language, myths, and customs could receive a definitive treatment, or be understood, in terms of the more primitive psychological processes. . . . The best that can be done is to provide careful genetic and comparative descriptions as well as critical analyses of social phenomena.[21]

In 1894 Wundt published his monograph on *Psychic Causality*. This was the same year that Avenarius wrote his first paper on psychology and Dilthey published his *Ideas on Descriptive and Analytical Psychology*. Wundt's assistant, Kulpe, wrote his *Groundplan of Psychology* in 1893, which marked the beginning of his break with Wundt over the nature of psychology. Kulpe came to favor a positivist approach for psychology while Wundt continued to develop a model of psychology that borrowed certain experimental methods from the physical sciences and yet still allowed for other methods for studying the higher mental processes. Wundt did not accept Avenarius and Mach's position that science must limit its data to sensa and avoid all subjective additions to and projections from these supposedly apodictic givens. Thus his role in the anti-positivist side of the debate must be recognized, even though he is often presented as a champion of the physical science model.

Franz Brentano (1838–1917)

Franz Brentano shared with Dilthey and Wundt the belief that the object of inquiry for psychology should be human experience in its fullness. Unlike Mach and Avenarius, who believed that sense data were primary, Brentano sought to understand experience as it is lived—which means the inclusion of judgments and valuing as well as perceptions of objects. He wanted to emancipate knowledge of human phenomena from the speculative efforts of scholastic philosophers, and in the spirit of the time he looked for an empirical base for such knowledge. He engaged in considerable correspondence with Mill, and he shared the ambitions of the positivists to adopt the methods of the natural sciences for studying human phenomena. Unlike the positivists, however, Brentano wanted to use these methods to approach such final metaphysical questions as the relationship between the mind and the body and the possibility of immortality.

In 1869, Brentano published an article on Comte, exploring in a sympathetic way the possibility of a positivistic renewal. He could not accept Comte's repudiation of psychology, however, and finding support in Mill, he held that psychology—that is, the study of experience itself—was the proper vehicle for the positivist reform. He contended that the problem with the study of experience thus far was a lack of groundwork that would clarify the fundamental categories and basic divisions in experience. In his view, this preparatory work needed to be done before the metaphysical questions he had in mind could be addressed from an empirical standpoint.

Brentano's most important book is *Psychology from an Empirical Standpoint* (1874; 1911). The book opens with a direct statement of his position:

> The title I give to my book characterizes its subject matter and its method. My standpoint in psychology is empirical: Experience alone is my teacher. But I share with others the conviction that a certain ideal intuition [*ideale Anschauung*] can be combined with such a standpoint.

His acknowledgment of the empirical source of knowledge is straightforward, but the additional source of knowledge he cites—the "ideal intuition"—is not fully explained and considered in the book. Herbert Spiegelberg[22] believes that Brentano was referring to the type of knowledge that one has of the goodness or badness of something, a type of knowledge acquired at one stroke without induction from experience. Brentano wanted to recognize a special kind of experience that is not allowed for in traditional empiricism and that is wide enough to include such phenomena as love and hate. In addition to experiencing objects in the world, one experiences love of an object or love of a person. Brentano wanted an empiricism that would recognize these aspects of experience.

It became clear to Brentano that his approach went beyond the psychology of Mill and opened up the realm of experience in such a manner that what was to be found had not yet been categorized and clarified. Consequently, he proposed that the new psychology should be made up of two major divisions: genetic psychology and descriptive psychology. Genetic psychology would study the causal relationships among the various aspects of the widened empirical realm—but before causal relationships could be established, a full descriptive psychology needed to be developed. The empirical realm needed to be mapped out before it could be causally explained. He drew on the subdivision between descriptive and explanatory (genetic) efforts that had been made in other sciences—such as, for instance,

the subdivision between anatomy and physiology—and he took his name for a descriptive psychology from a descriptive subdivision of geology, called "geognosy." He coined the term *psychognosie* (*psycho* means "soul"; *gnosie* means "knowledge") for the study of the organization and structure of everyday experience. The problem for *psychognosie* was how to delimit and articulate the sprawling, elusive, and amorphous flow that makes up experience. The first step was to isolate and to identify the basic divisions of experience, and to this end Brentano devoted most of his time.

His concern was to give a basic articulation of the chief categories that can be used in describing the experiential field. For instance, are sensations, feelings, and judgments separate phenomena, or are they overlapping? Are they on the same level of experiential strata, or are they on different levels? The work of a descriptive psychologist differs from the work of, for example, a bird watcher: the bird watcher works within an already developed classificatory system, and he has only to identify the category to which a bird belongs; but the descriptive psychologist does not have an already developed system, and so must identify the basic categories themselves and describe their structural features. After this basic work is done, then it is possible to determine in which category a particular experience belongs. Lacking the categorical structure, it is not possible to develop genetic psychology, for until the categories are clarified one does not know what events produce what causes.

Thus Brentano qualified his initial enthusiasm for methods drawn from the physical sciences. The inquiry into the categories of experience, he decided, must precede the formation of knowledge about the relationships among events, and it needs to use methods that cannot be obtained from the physical sciences.

Ever since Comte's attack on introspection, access to the data of experience had been viewed as problematic. As mentioned in the discussion of Wundt, the notion of introspection (*Selbstbeobachtung*) naively assumed that the data of consciousness or experience are available through self-observation. But as one observes one's own experience, something interferes with the experience; it is no longer what it would be if one were merely experiencing and not trying to observe oneself at the same time. Self-observation transforms the very experience it tries to observe. Mill, in answer to Comte (who was joined by Lange), held that this difficulty of interference could be overcome if self-observation could be conceived of as a kind of "retrospection" in which what is observed is not the experience itself as it is happening, but a memory of the original experience. This observation of a memory, however, along with the distortions

of the memory act itself, would obviously not measure up to the standards of empirical observation, for empirical observation addresses itself to the experience of events as they occur and not to their memory images.

Like Wundt, Brentano maintained that the criticism of self-observation did not hold for "inner perception" (*innere Wahrnehmung*). Inner perception is the immediate awareness of one's own psychological phenomena, of one's joys, sadness, desires, and rage. As Brentano saw it, inner perception is possible only "in the margin" of experience while one's main attention is focused on external objects. He believed that it is possible to observe the immediate trace of an inner perception while it is still within the range of immediate memory. Thus the "empirical" data which Brentano sought to describe and classify could be developed only through the act of inner perception—that is, by conscious awareness of one's own experience as it occurs.

As he approached the task of describing mental phenomena, Brentano's first problem was to separate them out from the other data of consciousness. "All data of our consciousness," he wrote, "are divided into two great classes—the class of physical and the class of mental phenomena."[23] The examples he gave of physical phenomena in consciousness included "a color, a figure, a landscape . . . , a chord . . . , warmth, cold, odor which I sense; as well as similar images which appear in imagination."[24] Mental phenomena in consciousness were mental activities: "Every judgement, every recollection, every expectation, every inference, every conviction or opinion, every doubt, is a mental phenomenon."[25] The basic characteristic of mental phenomena was "intentionality" (a technical term Brentano borrowed from scholastic philosophy). The property of mental activity was that it referred to an object. The mental phenomenon in consciousness referred to something, and the thing referred to was the physical phenomenon. In the new positivism of Mach and Avenarius, the only phenomena to be attended to were what Brentano called the physical phenomena—that is, the objects of direct sense perception. Brentano identified psychology as the study of the rest of experience, the intentional acts themselves; *acts* referring to objects were the proper study of psychology.

Having delineated the subject matter of psychology, Brentano turned to an investigation of the basic types of these acts. He found three basic categories of mental phenomena: representations, judgments, and acts of love and hatred. Representations (*Vorstellungen*) are ideas, thoughts, and presentations; they provide the foundation for the second and third categories. The second category, judgment,