KANT AND EMPIRICAL PSYCHOLOGY IN THE 18TH CENTURY

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Kant lectured on anthropology for nearly 25 years, from 1772 until he retired in 1796. He subsequently went over his lecture notes for publication, and the resulting book—the last published under his supervision, in 1798—is presented here in translation, with a helpful introduction and explanatory notes. The lectures touched on many aspects of human cognition and behavior, including topics Kant called “empirical psychology.” The published version of these lectures is lighter and quicker than the philosophical works Kant wrote directly for publication. It is especially valuable for the window it offers into Kant’s thoughts on empirical psychology, and into the state of empirical psychology in his time.

The range of topics covered in the lectures shows remarkable variety. Kant discussed self-consciousness and self-observation (pp. 9–17), unnoticed (or unconscious) ideas and mental processes (pp. 18–21), and the marks of perspicuous cognition (pp. 21–24). He distinguished sensation from thinking (pp. 24–28); described the proper relation between them (pp. 28–32); addressed cognitive facility, sensory illusion, and moral perception (pp. 32–40); and examined the five senses, memory, imagination, and dreams (pp. 40–83). He discussed the reading of natural and artificial signs (pp. 83–89). He described the three higher cognitive faculties of understanding, judgment, and reason; analyzed the weaknesses and illnesses to which they are subject; and offered advice on perfecting their use (pp. 90–129). He examined feelings of pleasure and pain and their proper role in human life (pp. 130–141), distinguished such feelings from aesthetic and moral judgments (pp. 141–147), and gave advice on cultivating good taste (pp. 148–154). He described the emotions and passions and how to control them (pp. 155–191). He considered how the character of persons can be known from comportment and physiognomy (pp. 195–215); offered observations on the character of the sexes (pp. 216–225); compared the characters of the French, British, Spanish, Italian, German, Greek, and Armenian peoples (pp. 225–236); and characterized the human species in relation to other terrestrial animals and to possible extraterrestrial rational beings (pp. 236–251). He offered advice on giving a good dinner party (pp. 187–190). And he analyzed the methodological problems that come with attempts at self-observation (pp. 5, 16–17).

As is apparent, Kant’s Anthropology falls under several of today’s literary genres. Parts of it can be variously classed under theoretical psychology, philosophical psychology, cultural anthropology, etiquette, and self-improvement. The lectures were intended to give students knowledge of the world—which meant in this case knowledge of the human world—along with tips about how to better one’s self and to make one’s way (pp. 3–4). My interest here is the psychological content of the book, focusing on perception and cognition, which constitutes the largest single subpart. Although Kant frequently lectured on psychological topics in his course on metaphysics (a standard practice in 18th-century Germany), the Anthropology contains the single most important statement of his collected views on empirical knowledge of mind. I want to bring out what was new and interesting about the book in Kant’s day, to show what it reveals about Kant’s psychological theorizing and that of his time, and to define its larger significance for the history of psychology.

Kant subtitled his book as anthropology “from a pragmatic point of view.” He distinguished this sort of anthropology from the “physiological” variety (p. 3). In Kant’s usage, “physiological” referred not specifically to the study of bodily structures and functions, but to the study of all of nature. In this case, the word “physiology” is another word for “physics,” or the theory of nature (both derive from the Greek root physis, meaning “nature”). A purely physiological anthropology would include the study of the physical characteristics of human beings, but it would not be equivalent to what is now called physical anthropology. It would also include the purely theoretical study of human mental faculties and their activity, considered as natural (hence physical or physiological) human functions. By contrast, pragmatic anthropology studies the human mind as it guides behavior, and human physical features as they influence and reflect character; it looks to the improvement of humankind. More specifically, it is concerned with “what man makes, can, or should make of himself as a freely acting being” (p. 3). So, whereas physiological anthropology might speculate about brain structures subserving memory, pragmatic anthropology asks how memory can be improved, and draws on theoretical knowledge only for this purpose. Similarly, the role of “obscure” or unnoticed ideas in sensation is a concern for the physiological, or natural scientific, study of the mind; it does not have pragmatic consequences because it cannot be brought under conscious control of the individual (pp. 19–20).

PSYCHOLOGY AND ANTHROPOLOGY IN KANT’S TIME

The intellectual significance of Kant’s anthropology must be judged against the background of the state of psychology—and, to a lesser extent, anthropology—in Kant’s day. In the latter half of the

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1. Unless otherwise indicated, all page references are to Dowdell’s translation of Kant’s Anthropology.

2. Selections from Kant’s lectures on metaphysics are available in English translation (Kant, 1997a).
THE FIRST INTRODUCTORY TEXTBOOK?

It may have been Christian Wolff (1679–1754) who gave psychology its name, and Wilhelm Wundt (1832–1920) who gave psychology its first laboratory, but it seems to have been Immanuel Kant (1724–1804) who gave psychology its first introductory textbook—at least the first textbook in a form we would recognize today. Beginning in 1772, Kant began offering a series of lectures on “anthropology,” or knowledge of mankind, at the Albertus University of Königsberg. In this issue, Psychological Science celebrates the bicentennial of their publication in 1798.

Of course, there was little to be had by way of empirical psychological science in the late 18th century, and it did not help that Kant believed that an experimental science of the mind was impossible. But relying on subjective experience and rational analysis, Kant managed nonetheless to produce a textbook that looks familiar to anyone who teaches the modern introductory course. Kant begins with the “cognitive faculty,” just as the modern textbook begins with learning and cognition. And he ends with remarks on personality, sex differences, and ethnic and racial differences, just as personality and social psychology tend to fall near the end today. There are some mistakes: Kant was perhaps a little too enamored of physiognomy, for example, and his remarks on sex, race, and ethnic differences will strike the modern reader as not just politically incorrect but, well, sexist and racist and ethnocentric. But at least Kant was trying to put it all together, to relate what goes on in the individual mind to what goes on in the world—just as the modern textbook does.

And there are some startling innovations. Kant begins his discussion of cognition with consciousness, expressly relates consciousness to the existence of a self-concept, and analyzes the role of unconscious ideas in conscious experience, thought, and action. There is a major section on imagery and imagination, and another on deficits in intelligence and other aspects of cognition. There is a whole chapter on emotion—modern textbooks rarely have one—and another on motivation. In treating the faculties of feeling and desire as independent of the faculty of cognition, Kant stakes out a position in a debate that resonates today—whether affects and motives are products of cognitive processes. The book concludes with an exercise in comparative psychology, in which Kant attempts to delineate those qualities of mind and behavior that are distinctly human.

As Gary Hatfield, who is both a philosopher and a psychologist, notes in his review, there are many treasures in the Anthropology. Strangely, given that it provides the reader with a complete and concise introduction to Kant’s entire system of thought, the book has not been available except in the German edition of Kant’s collected works. We can be grateful to Victor L. Dowdell for making the translation as a kind of labor of love, to Hans H. Rudnick for editing and revising Dowdell’s effort, and to Southern Illinois University Press for reissuing their work in an accessible paperback edition.

18th century, psychology was an established discipline in college and university curricula. Indeed, in a book titled Essai de psychologie (An Essay on Psychology), published in 1755, the author felt the need to issue an apology, familiar in psychology textbooks of today, for contributing to a field in which “so many books have been written” that it might be supposed “everything has been said” (Bonnet, 1755, pp. v–vi). In the decade of the 1790s, when Kant published his Anthropology, there were numerous textbooks of psychology in print (Carus, 1808/1990, pp. 653–745). Several journals had been founded (Dessoir, 1902, p. 154), with names such as Magazin zur Eheführungseelektrik (Journal of Psychology) and Allgemeines Repertorium für empirische Psychologie (General Repertorium for Empirical Psychology). Jacob Friedrich Abel (1751–1829) held the title of Professor of Psychology and Morals at the newly founded Karlsruhe (in its university period at Stuttgart, 1782–1794). He was the author of one of the many textbooks in introductory psychology. His was titled Einleitung in die Seelenlehre, or Introduction to the Science of Mind (or to Psychology); in the introduction, he subsumed Menschenlehre (anthropology, or the science of man) under “philosophy,” with the latter term understood broadly to include natural philosophy or natural science, the methods of which, Abel maintained, should be used in psychology (1786/1985, pp. xxi–xxxi).

What was this psychology that flourished in Kant’s time? Intellectually, it was the study of the mind or soul in all of its aspects. It included metaphysical questions about the nature of mind and the mind–body relation, though the tendency to defer such questions increased throughout the 18th century. It sought to provide thorough empirical descriptions of the mind’s states and capacities, including the “lower” faculties, sense and imagination; the “higher” faculties, intellect and reason; and volition (or desire) and emotion. And it tried to formulate explanatory laws of mental activity. The empirical content came from everyday observation and from attentive self-observation, as well as from recorded history, novels, travel literature, and systematic quantitative observation.

The psychology that flourished in Kant’s day held a place in the university curriculum defined in the ancient and medieval schools by Aristotle’s De anima (On the Soul) and related writings (Hatfield, 1995). The De anima writings and commentaries constitute a major portion of the corpus of Western philosophy. Because Aristotle’s concept of psyche or soul (anima in Latin) was that of an animating or vivifying principle, logon peri tes psyches, or the study of the soul (which was given the one-word name “psychology” in the 16th century) included study of the nutritive and reproductive aspects of plant and animal life, together with sensory and intellectual cognition. But the analysis of the cognitive powers of animals, including the rational animal (the human being), was the most studied aspect of Aristotelian psychology (or “animistics,” in its Latin form). De anima psychology was a required course at most European universities in early modern times. The subject matter was classified under the rubric of physics, broadly construed as the general theory of nature. At this time, the soul was typically regarded as a natural being, and its study was included within the study of nature. Even Cartesian textbook writers, who, unlike the Aristotelians, viewed the soul as an immaterial substance capable of existing independently of matter, placed the study of the mental function as aided by the brain under the general heading of physics (Le Grand, 1694/1972, pt. 9; Regis, 1691, Physique, bk. 8, pts. 2–4); this included study of sense, imagination, memory, judgment, and reasoning.
The Aristotelian curriculum was reorganized or replaced in German universities during the 18th century. One especially influential replacement system was that of Christian Wolff (1679–1754), who taught at Halle and Marburg. In Wolff’s scheme, psychology was divided into “empirical” and “rational” (or theoretical). Both were classed under metaphysics, and this explains why Kant taught empirical and rational psychology as part of his course on metaphysics. But Wolff, unlike Kant, believed that metaphysics could draw on empirical sources; he held empirical psychology to be the foundation for theoretical psychology (Wolff, 1980). Wolfian psychology investigated the metaphysical questions found in the mind–body problem, including mind–body interaction; it classified mental powers and capacities, which included sense, imagination, memory, attention, intellect, desire, emotion, volition; and it described the functioning of these capacities, including the association of ideas, the restrictive capacity of attention, and limitations on memory (Wolff, 1738, 1740). Wolff made numerous empirical claims in psychology. He described an inverse relation between the intensity of attention and the extent of the cognitive material that can be brought under it: The greater the attention, the smaller the part of the visual field to which it extends (Wolff, 1740, §360); he also suggested that with equally distributed attention, the portion of a representation that is otherwise cognized most clearly will come to the fore (Wolff, 1740, §367). He proposed that “goodness of memory” can be estimated by the temporal latency of response to a memory demand, the number of trials it takes to retrieve an item from memory, and the number of acts it takes to fix an item in memory (Wolff, 1738, §191, p. 131), though he gave no indication of having employed these tests in systematic empirical study.

The decade of the 1750s saw three independent attempts to launch a natural scientific psychology. The French physician Guillaume-Lambert Godart (1717–1794), who earned his M.D. at Reims, published La physique de l’ame (Physics of the Soul) in 1755. The content of the work was heavily Aristotelian, but it emphasized the program of treating the mental function in relation to the brain. Its chief physical contribution in this sense was to argue, based on observations made by François de la Peyronie, that the seat of the soul is the corpus collium (pt. 1, chaps. 3–4). In 1756, the German physician Johann Gottlob Krüger (1715–1759), who was author of a textbook on Naturlehr (Physics, or Science of Nature) for use in medical schools, published a Versuch einer Experimental-Seelenlehre (Attempt at an Experimental Science of the Soul, or an Experimental Psychology). He collected numerous observations on brain-damaged patients, as natural experiments in psychology. He also speculated theoretically on the quantitative relation among stimulus (V), nerve state (which he labeled “tension,” T), and sensation (S), arguing that S is proportional to V times T. He reviewed the observations of others, including John Woodward’s studies of decorative and otherwise ablated birds, amphibians, reptiles, and insects. Finally, the Swiss naturalist Charles Bonnet (1720–1793) published his Essai de psychologie in 1755, followed by the Essai analytique sur les facultés de l’ame in 1760; in the latter, he promised to approach the phenomena of the mind as he had studied “insects and plants” (reprinted in Bonnet, 1769, p. vii), that is, as a natural historian, an observer of nature. Bonnet went into greatest detail in analyzing the laws of the association of ideas and in postulating speculative physiological mechanisms, vibratory in character (like those of Hartley, 1749/1966), to explain them. He also discussed attention in some detail, and intellectual development in relation to language learning. This new psychology of the 18th century flourished especially in Germany, so that by the 1790s, there were a variety of works proclaiming allegiance to an empirical approach. These works included those of Jakob (1795), Tetens (1777/1979), and Schmid (1796). Kant was reading Tetens within a year of its appearance (Kant, 1900, p. 215), and he was a close correspondent of both Jakob and Schmid (Holger, Gerresheim, Lange, & Goetzke, 1969, pp. 59, 115).

The science of optics, which from antiquity through the 18th century included the theory of vision in general, was a great spur to psychological thinking and methods. It provided extensive discussions of psychological processes, including especially the unnoticed judgments that were posited to explain size and distance perception, including size constancy and the moon illusion (Hatfield, 1990; Hatfield & Epstein, 1979). Work in optics also provided instances of quantitative measurement of visual phenomena. Robert Smith (1738, Vol. 1, pp. 63–66) evaluated a “flattened dome” explanation of the moon illusion—according to which the heavens are perceived as a flattened hemisphere, so that the moon appears larger near the horizon because it is perceived to be further away—by measuring the perceived visual angles between stars at various celestial latitudes and comparing the reported values to the known astronomical values. Patrick D’Arcy (1765) evaluated the duration of the visual impression on the retina by observing the speed necessary for a live coal swung in a circle to create the appearance of a closed ring. These theories and findings were repeated in textbooks and review literature. D’Arcy’s quantitative result of six or seven thirds (i.e., six or seven 60ths of a second) was repeated in Abel’s textbook (1786/1985, §43, p. 24); this and other quantitative findings were reviewed by Priestley (1772/1978). The theory that the moon illusion results from unnoticed judgments was commonplace, as Kant’s own allusions to it attest (p. 31; 1787/1998, p. 354).

Courses and textbooks in anthropology were less well established in Kant’s time. Indeed, in a published set of student notes from Kant’s lectures, he is reported to have claimed that his was the only lecture course titled “anthropology” in all Germany (Kant, 1831/1976, p. 5). But, contrary to some claims (e.g., Van De Pitte, 1971, p. 3), Kant was not the first in Germany to use the title. In the 16th and 17th centuries, “anthropology” was used for courses on the “science of man.” Such courses differed from traditional psychology primarily in their extensive coverage of anatomy and physiology, in addition to De anima topics (Casmann, 1594; Sperling, 1668). In Kant’s time, discussion of both bodily and mental characteristics had taken on a comparative aspect, so that anthropology involved descriptions of the varieties of humankind around the globe (Blumenbach, 1776/1969). Kant adopted a comparative stance in Part Two of the Anthropology, focusing on comparisons among European nations.

KANT’S CONTRIBUTIONS TO PSYCHOLOGY

In the Critique of Pure Reason, Kant developed a nuanced technical vocabulary for describing the mind, which continues to influence psychology (Hatfield, 1990; Leary, 1982). Examples include the notion that space and time are a priori forms of intuition, the analysis of the concept of an object in terms of spatiotemporal continuity and persistence through time, and the notion of a connection or apperceptive unity among the conscious states of an individual person. This vocabulary found its way into the Anthropology here and there, but it

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3. All page numbers for the Critique of Pure Reason refer to the pagination of the second German edition (shown in the margins of the 1998 translation).
Kant and Empirical Psychology

is not developed. In the lectures, Kant did not provide a systematic introduction to his own theory of cognition. Instead, he covered standard 18th-century fare. What was novel about the anthropology was its “pragmatic” turn, that is, the use of psychological material to provide guidance for individuals to help them avoid cognitive pitfalls, achieve self-improvement, and engage in effective social behavior.

The self-improvement aspect of the work deserves to be illustrated. Relevant comments are sprinkled throughout. In a discussion of pleasure and displeasure, Kant offered an opinion on the right number of guests at a dinner party (10) and on the correct order of conversation: narration, reasoning, jesting (pp. 186, 189). In discussing self-observation, Kant did not focus primarily on the methodological difficulties involved (though he did discuss those), but he highlighted the social implications. He told his young students that “attending (attention) to oneself in dealing with others is necessary, but it must not be obvious in daily intercourse; if it is noticeable, it makes conversation awkward (a hindrance) or affected (a mockery)” (pp. 15–16). In the chapter on imagination, he included a lengthy disquisition on drunkenness (pp. 58–62), showing a preference for wine over beer parties, decrying drunkenness but advising that hosts not stint in serving intoxicants so as to keep their guests pleased, and quoting Hume’s opprobrium toward drinking companions who “never forget” what they have heard or seen.

There is little that is novel in the psychology of Kant’s Anthropology. Kant did clarify the distinction among the faculties of aesthetic pleasure, sensory pleasure, and desire; although this “three faculty” theory had been enunciated before, he codified it (Beck, 1969, pp. 496–501). Kant may himself have believed that he introduced a novel position on the relation between the senses and understanding into the literature. He contrasted his position with that of Leibniz and Wolff. As Kant put it, these authors had seen the relation between the sensory representations and intellectual representations as a merely “logical,” as opposed to a truly “psychological,” distinction (p. 25).

By this, Kant meant that they saw the distinction as a matter of degree of clarity, and so as a distinction between the “confused” representations of the senses and the “clear” representations of the intellect.

By contrast, Kant considered sensory and intellectual representations to differ in kind. His term for a sensory representation was “intuition” (Anschauung), and his term for an intellectual representation was “concept” (Begriff). Famously, he held (pp. 24–27) that cognition requires both an active and a passive element, both concepts and intuitions. Intuitions arise from sensations represented in a spatial and temporal order. Concepts allow the understanding to subsume intuitions under kind (e.g., chair, dog). Although Kant’s analysis did depart from the standard Wolffian position, it was not as novel as he implied. Descartes (1641/1984, p. 295) had distinguished three grades of sense, including a sharp division between mere sensation and acts of intellectual judgment. Further, the widely held position, found in both Descartes (1641/1984, pp. 295–296) and Kant (p. 31), that the senses do not err because they do not judge already divides mere sensory receptivity from acts of judgment.

Kant’s statement that psychology can never become a science requires careful interpretation, in relation to both Kant’s conception of science and his other statements about psychology. His main argument

4. Although Dowdell’s translation is generally trustworthy, it is loose on occasion. Here, Aufmerken was translated as “perception,” for which I have substituted “attention.”
for excluding psychology rested on his own peculiar criterion of science: A true science must admit of a “pure” part, in which mathematics is applied a priori to the subject matter of the science. Using this criterion, Kant also concluded that chemistry is not a science, because mathematical laws of chemical attraction do not admit of being formulated a priori from the bare notions of matter and motion. Kant did not argue that chemistry could not use mathematics; rather, he said that it did not support a priori mathematical laws. Kant had his own systematic reasons for formulating his criterion of science as he did. But it is open to others to reject the demand for a priori mathematical laws in science, and to settle for empirical laws, mathematical or not.

In any case, Kant himself allowed some a priori application of mathematics to inner sense. In the first Critique, he argued that “in all appearances the real, which is an object of the sensation, has intensive magnitude, i.e., a degree” (1787/1998, p. 207). By this, he meant that it can be known that sensations will have a magnitude that falls on a continuum, with zero or “psychological darkness” at one end (1783/1997b, pp. 60, 62). The degree of sensation is not constructible a priori in intuition, for the reason that, in Kant’s technical terms, sensations are the “matter” and not the “form” of intuition, and only the geometrically described form is constructible (1787/1998, pp. 207–209, 741–742). Nonetheless, Kant claimed to establish a priori that sensations must admit of mathematical description.

If we leave aside Kant’s peculiar criterion for sciencehood, then his challenge to the possibility that psychology could become a quantitative science would have to rest on his remarks about the methodological difficulty of self-observation. In that event, his criticism was refuted in his own lifetime by publication of the quantitative results by Smith, D’Arcy, and others, as reviewed earlier. It is ironic that Abel published D’Arcy’s results in 1786, the same year Kant excluded psychology from true science. Moreover, a German translation of Priestley’s review of several quantitative results had already been published in 1776, though there is no evidence that Kant knew of the work. In any case, there were in Kant’s time known instances of the empirical application of mathematics to sensory experience. Kant would have had no philosophical reason to reject those instances, because they did not count against his claim about the a priori mathematical constructibility of psychological laws. Kant could have accepted these empirical applications of mathematics without inconsistency.

CONCLUDING REMARKS

Perhaps the greatest significance of the empirical psychology in Kant’s Anthropology for today is that it draws attention to the larger body of psychological theory present in the 18th century. There was a highly developed theory of unnoticed psychological processes, including unnoticed judgments underlying perception, that Kant merely alluded to but did not discuss in its full sophistication. There were detailed discussions of attention, memory, and imagination, and proposals of laws governing these capacities. There was a developed associative tradition that spawned speculative physiological theory. This psychology was in continuous existence in Germany into the late 19th century (Sachs-Hombach, 1993). It provided the conceptual, theoretical, and institutional basis for the new experimental psychology that developed in the latter part of the 19th century (Hatfield, 1997).

Beyond this revelatory aspect, Kant’s Anthropology is interesting for the psychological insights and advice peppered throughout. Some of the advice is still applicable, such as that about self-consciousness in conversation. Other advice, such as the admonition that young girls especially should be encouraged to smile, so as to develop “a disposition of joyfulness, friendliness, and sociability” (p. 171), will raise questions about implied sex differences and Kant’s attitude toward women. Kant’s intentions toward his young male lecture audience were benevolent. He seemed genuinely concerned to instill in his hearers workable attitudes for living. A final example of this attempt also reveals something of Kant’s own psychology, as the great, prolific, and solitary philosopher of Königsberg:

Why is work the best way of enjoying life? Because it is a troublesome occupation (unpleasant in itself and delightful only in its success), so that relaxation, through the mere disappearance of a long hardship, turns into sensible pleasure, that is, cheerfulness, because otherwise there would not be anything enjoyable...Finally, one who is not induced to activity by any positive pain will always be affected by a negative one, namely, boredom, perceived as a form of emptiness of sensation by the person accustomed to change of sensations. In trying to fill his life with something such a person will often feel compelled to do something harmful to himself rather than do nothing at all. (p. 133)

Here Kant has recorded an insight into the psychology of the writer that applies to that species across at least some times and places. The Anthropology is to be recommended not only for the window it provides into early modern psychology, but also for the entertaining, witty, and insightful remarks it records for posterity.

REFERENCES


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