

# CHRISTIAN WOLFF'S PROLEGOMENA TO EMPIRICAL AND RATIONAL PSYCHOLOGY: TRANSLATION AND COMMENTARY\*

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## INTRODUCTION

Though not the first to use the term "psychology" (*psychologia*),<sup>1</sup> Christian Wolff did give it currency in the mid-eighteenth century. He was the first to mark off the discipline of empirical psychology and to distinguish it from rational, or theoretical, psychology. This distinction and his conception of the two corresponding methods of conducting psychological inquiry, especially his emphasis on the use of introspection, profoundly influenced the course of psychological science during the eighteenth and nineteenth centuries. These historical circumstances supply sufficient reason for translating the two brief tracts which epitomize Wolff's psychology, the prolegomena to his *Psychologia empirica* and *Psychologia rationalis*.<sup>2</sup>

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<sup>1</sup> Rudolf Goclenius, a scholastic composer of philosophical lexicons, seems to have been the first to have used the term "psychology" (in Greek letters); it appeared as part of the title of a collection of tracts, which he edited in 1590, on the nature and origin of the human soul. Several other authors prior to Wolff, including Leibniz, also used the term to refer to a distinct discipline. The discipline itself, of course, may be traced back to Aristotle's *Peri psychē* and a multitude of Scholastic treatises, usually carrying the title *De anima*. Jean École, in his introduction to the photo-reproduction of Wolff's *Psychologia empirica* (see next note for bibliographic details), lists several of the works in which the term "psychologia" appeared before Wolff.

<sup>2</sup> The texts used in the translation of Wolff's two prolegomena are: *Psychologia empirica, methodo scientifica pertractata, qua ea, quae de anima humana indubia experientiae fide constant, continentur* (2nd ed.; Francofurti & Lipsiae: officina libraria Rengeriana, 1738; 1st ed., 1732); and *Psychologia rationalis, methodo scientifica pertractata, qua ea, quae de anima humana indubia experientiae fide innotescunt, per essentiam et naturam animae explicantur* (2nd ed.; Francofurti & Lipsiae: officina libraria Rengeriana, 1740; 1st ed., 1734). The second edition of these works does not differ essentially from the first. The *Psychologia empirica* was paraphrased and abridged by an anonymous French admirer (A. T.); it appeared as *Psychologie ou Traité sur l'ame*, par M. Wolf (Amsterdam: Schreuder & Mortier, 1756).

In the footnote commentary, I have followed Wolff's convention of referring to passages by the use of section numbers: thus the citation "*Psychol. empir. #142*" is to the section of his *Psychologia empirica* so numbered; "*Psychol. rat. #34 not.*" indicates Wolff's note of explanation and com-

ment to section 34 of his *Psychologia rationalis*. In the translations, Wolff's own explanatory notes are preceded by an asterisk. The following abbreviations will also be employed: *Log: Philosophia rationalis sive Logica, methodo scientifica pertractata et ad usum scientiarum atque vitae aptata. Praemittitur Discursus praeliminaris de philosophia in genere*, Francofurti et Lipsiae: 1728, 1732, 1740. *Disc. praelim.: Discursus praeliminaris de philosophia in genere* (this part of Wolff's *Log.* has been translated by Richard Blackwell: *Christian Wolff, Preliminary Discourse on Philosophy in General* [Indianapolis: Bobbs-Merrill, 1963]); *Ontol.: Philosophia prima, sive Ontologia, methodo scientifica pertractata, qua omnis cognitionis humanae principia continentur*, Francofurti et Lipsiae, 1730, 1736; *Cosmol.: Cosmologia generalis, methodo scientifica pertractata, qua ad solidam, in primis Dei atque naturae, cognitionem via sternitur*, Francofurti et Lipsiae, 1731, 1737; *Vernunft. Gedank.: Vernunftige Gedanken von den Kräften des menschlichen Verstandes und ihrem richtigen Gebrauche in Erkenntnis der Wahrheit*, Halle, 1713.

All of the above, except the *Log.*, have appeared in Christian Wolff, *Gesammelte Werke*, ed. H. Arndt and J. École (Hildesheim: Olms, 1962-). The Latin volumes of the *Gesammelte Werke* are photocopies of the final Frankfurt editions.

<sup>3</sup> Details of Wolff's early studies and career are given in the extensive compendium of his contemporary disciple Carl Günther Ludovici, *Ausführlicher Entwurf einer vollständigen Historie der Wolffschen Philosophie* (3 vols.; Leipzig: Löwe, 1735-1738).

<sup>4</sup> C. Gerhardt has edited and published the correspondence in *Briefwechsel zwischen Leibniz und Christian Wolff* (Hildesheim: Olms, 1963).

which finally so antagonized his Pietistic colleagues that it secured his exile in 1723. Under ban of Frederick I, Wolff was given forty-eight hours to leave the country. By this time, however, his several German works in philosophy and his tracts in mathematics had won him considerable attention, even outside his native land. To reach that wider audience, he began elaborating his complete system of philosophic science in a series of Latin volumes done largely in the Scholastic style, starting with *Philosophia rationalis sive Logica* in 1728 and continuing with works in cosmology, psychology, natural theology, ethics, mathematics, mechanics, optics, astronomy, and other sciences. His *Psychologia empirica* appeared in 1732 and in a revised edition in 1738; his *Psychologia rationalis* also went through two editions, in 1734 and 1740. In 1740 Frederick II recalled Wolff from Marburg, where he taught during his exile, and appointed him professor of law at Halle. In 1743 Wolff became rector of the University and in 1745 a baron of the Holy Roman Empire. He remained at Halle until his death at age seventy-five.

The principal subject of Wolff's empirical psychology, as well as his rational psychology, is mind (or soul) and its activities. The two disciplines of psychology, in his construction, are distinguished chiefly by their methods. Empirical psychology, while not neglecting observations of external behavior, has as its primary method the mind's direct introspection of its own activities, either by catching on the wing its normal operations or by contriving experiments in order to elicit particular acts. Wolff details two sets of assumptions, one regarding the structure of perceptual experience and the other its certitude, that make the introspective method of empirical psychology possible.

According to Wolff, perception is an act of the mind by which it represents to itself something occurring either outside or within itself. Thus the mind perceives not only colors, sounds, odors, etc., but also itself and its own activities.<sup>5</sup> In Wolff's scheme, perception has two fundamental features: the represented content and the mind's act of representing.<sup>6</sup> In addition, he discriminates a further mental act, that by which perception as such (both the act and the content) becomes consciously present to the mind. Following Leibniz he calls this "apperception"<sup>7</sup> and sees it as the principal instrument of investigation in empirical psychology. For apperception is a willful act by which one attends to mental operations and, through effort and perhaps extrinsic aid, brings perceptions from obscurity and vagueness to more luminous states of clarity and distinctness.<sup>8</sup>

For Wolff, the essence of scientific understanding is the ability to demonstrate propositions—that is, logically to derive them from definitions, axiomatic truths, propositions already demonstrated, or propositions expressing indubitable experience. In regard to mental science, empirical psychology is charged with two basic functions: to produce indefeasibly certain experience, on the basis of which propositions concerning the nature of mind can be demonstrated; and by the same means, to furnish experiential corroboration for deductive conclusions. That empirical psychology can yield such experience in the performance of these functions is insured by Wolff's assumption that apperception is involved in every cognition of objects and events.<sup>9</sup> He is thus confident that through careful attention to our perceptions, we can have veridical experience of the mind's activity.<sup>10</sup>

In complementary fashion, rational psychology proceeds *a priori* and deductively to demonstrate truths about the mind. The concepts and propositions which it uses are derived from more fundamental disciplines—physics, metaphysics, and empirical psychology. Because of its *a priori* and deductive character, rational psychology for Wolff comes closer than empirical psychology to realizing the ideal of science as a set of ordered propositions, of which the antecedent provide sufficient reasons for the consequent. Moreover, in his view, rational psychology is able to penetrate further than empirical psychology, because not all features of mind are immediately accessible through direct introspection. There is, however, a price to be paid for speculative extension—rational psychology is less certain. Long chains of reasoning invite mistakes. Here empirical psychology has the advantage, for it keeps the mind in contact with the immediate data of mental facts.

In the actual conduct of psychological science, Wolff regards empirical and rational psychology as really two moments of the same discipline. For though empirical psychology begins with the particulars of mental life, it yet clothes them with general concepts and articulates them in precise definitions; further, it arranges its certain empirical propositions to show their logical relationships. Rational psychology, on the other hand, has among its principles of demonstration those provided by empirical psychology.<sup>11</sup>

<sup>5</sup> *Psychol. empir.* #26.

<sup>10</sup> *Psychol. empir.* #28. See also the comments in footnote 10 to "Prolegomena to Rational Psychology."

<sup>11</sup> Wolff's theory of the intuitive judgment (*Log.* #669-709), in which propositions about particular relationships are brought to analytic certainty, is another feature of his system which bridges the gap between empirical and rational method in psychology. (See footnote 10 to "Prolegomena to Empirical Psychology.") Richard Blackwell discusses this and other aspects of Wolff's conception of the soul in "Christian Wolff's Doctrine of the Soul," *Jour. Hist. of Ideas* 22 (1961) : pp. 339-354.

<sup>5</sup> *Psychol. empir.* #24.

<sup>6</sup> *Psychol. empir.* #48 not.

<sup>7</sup> *Psychol. empir.* #25.

<sup>8</sup> *Psychol. empir.* #25, 234.

In this respect, Wolff's conception of his science does not differ terribly from contemporary notions of psychology as a theoretical structure whose basic laws are suggested and its deductively derived hypotheses tested by experience; and many psychologists today might take comfort in Wolff's comparison of the methods of psychology to those of physics and astronomy.<sup>12</sup>

The influence of Wolff's philosophic science and the reaction to it spread in many directions through the eighteenth and nineteenth centuries. Alexander Baumgarten (1714–1762), Georg Friedrich Meier (1728–1777), Moses Mendelssohn (1729–1786), and Johann Heinrich Lambert (1728–1777) felt the pull of Wolffian systematic philosophy.<sup>13</sup> Hermann Samuel Reimarus's (1694–1768) theory of animal instinct and intelligence<sup>14</sup> reflected Wolff's conception of the animal soul described in the *Psychologia rationalis*.<sup>15</sup> Martin Knutzen (1713–1751) was a purveyor at Königsberg of Wolffian doctrine<sup>16</sup> and with it kept his student Immanuel Kant (1724–1804) rapt in pre-critical slumber.

But once awakened, Kant directed a crushing attack against the rationalistic assumptions of Wolff's philosophy, particularly his psychology. Kant denied that reason was capable of drawing veridical conclusions about reality from concepts alone. His incisive exposition of the paralogisms of rational psychology<sup>17</sup>—the uncritical, *a priori* deductions asserting the ego to be a substance, a simple entity, an enduring personality, and related in specific ways to the external world—slashed the roots of Wolffian rational psychol-

ogy and withered its derivative claims about the soul's immateriality, spirituality, and immortality. But Kant's criticism did not cut quite so deeply into psychology as an empirical science. He, in fact, recommended that "we study our soul in the textbook of experience."<sup>18</sup> Yet Kant refused psychology that tool which might have made it a truly rigorous science—mathematics.

This struck at a revolutionary proposal by Wolff for method in empirical psychology. Encouraged by Leibniz and perhaps inspired by the attempts of Christian Thomasius (1655–1728),<sup>19</sup> Wolff argued that the objectives of physics and psychology were analogous and that the mathematical analyses which succeeded so well in the former could profitably be applied to the latter. He called this approach "psychometriae"<sup>20</sup> and suggested that through its use various complexes of desires and aversions could be analyzed into constituent magnitudes corresponding to the perfections and imperfections displayed by an object, and that the degree of our certitude in judging these qualities could be calculated, so that a rational apportionment could be made of goods to be pursued. Kant discounted the possibility of such a program, since introspection into the mental sphere could only

<sup>18</sup> Kant, *Kritik der reinen Vernunft*, A382, p. 384.

<sup>19</sup> At the conclusion of his *Dissertationem Algebraicam de algorithmo infinitesimali differentiali*, done at the University of Leipzig in 1704, Wolff contended that matters of morals were amenable to mathematical analysis. Leibniz, to whom Wolff sent his treatise, agreed that the analogy with physics was indeed suggestive of similar laws of behavior (*Briefwechsel*, pp. 17–18). The ideal of using quantitative measure in the analysis of passionial states can be traced to Plato, who sketched a model for a hedonistic calculus in *Protagoras*, 256A–C. Spinoza further advanced this program by treating human behavior and appetites "as if I were considering lines, planes, or bodies" (*Ethica*, III, preface). But Wolff likely based his proposal more proximately on the example offered by Christian Thomasius, who had served as professor and rector at Halle. In a brief tract in 1690 and in an elaboration in the following year, Thomasius argued that an individual's temperament was constituted of four fundamental *passiones* or humors—rational love, sensuality, greed and ambition—and that these could be assigned proportional numerical values, arbitrarily set between grades of 60 and 5. So, for example, Cardinal Mazarin was estimated by Thomasius to have 60 grades of ambition, 50 of sensuality, 20 or 30 of rational love, and 5 or 10 of greed. The aim of this sort of mathematical analysis, as the title of Thomasius's earlier work indicates, was "the discovery from daily conversation of the secrets in the hearts of other men even against their wills" (*Das Verborgene des Herzens anderer Menschen auch wider ihren Willen aus der taglichen Conversation zuerkennen*). The *Weitere Erleuterung* (1692) of this "new science" was reprinted in his *Kleine Deutsche Schriften* (Halle: Salfeld, 1701). Paul McReynolds and Klaus Ludwig reported on this aspect of Thomasius's psychology ("Psychometrics in the Seventeenth Century: the Personology of Christian Thomasius") at the ninth annual meeting of Cheiron (University of Colorado, 1977).

<sup>20</sup> *Psychol, empir.* #522 not. and 616 not.

<sup>12</sup> See "Prolegomena to Empirical Psychology" #5 not.

<sup>13</sup> See for instance: Alexander Baumgarten, *Metaphysica* (Halle: Hemmerde, 1739) and *Initia philosophiae practicae primae* (Halle: Hemmerde, 1760); Georg Friedrich Meier, *Vernunftlehre* (Halle: Gebauer, 1752), *Metaphysik* (4 vols.; Halle: Gebauer, 1755–1759), and *Betrachtungen über die Schranken der menschlichen Erkenntnis* (Halle: Hemmerde, 1775); Moses Mendelssohn, *Abhandlung über die evidenz in metaphysischen Wissenschaften* (Berlin: Haude und Spener, 1764); and Johann Heinrich Lambert, *Neues Organon oder Gedanken über die Erforschung und Bezeichnung des Wahren und dessen Unterscheidung von Irrtum und Schein* (2 vols.; Leipzig: Wendler, 1764).

<sup>14</sup> Reimarus developed his theory of animal instinct in *Abhandlungen von den vornehmsten Wahrheiten der natürlichen Religion* (Tübingen: Frank und Schramm, 1754), part 5; and *Allgemeine Betrachtungen über die Triebe der Thiere* (Hamburg: Bohn, 1760). Reimarus's *Die Vernunftlehre* (Hamburg: Bohn, 1756) as well as works mentioned in the preceding note were Wolffian tracts against which Kant reacted.

<sup>15</sup> *Psychol. rat.* #749–770.

<sup>16</sup> See, for instance, Martin Knutzen, *Elementa philosophiae rationalis logicae cum generalis tum specialioris mathematica methodo* (Lipsiae: Hartung, 1747).

<sup>17</sup> Immanuel Kant, *Kritik der reinen Vernunft* (eds. 1781 and 1787), A341–405, B399–432, *Werke*, ed. Wilhelm Weischedel (6 vols.; Wiesbaden: Insel-Verlag, 1956–1964), 2: pp. 341–398.

yield a flux along the dimension of time; he did not find there the permanency of objects existing in space that could supply a foundation for a mathematical account of the soul's internal processes.<sup>21</sup> Wolff's project, however, was not stillborn. Johann Friedrich Herbart (1776–1841) overcame Kant's objections and developed just the type of psychometry that his predecessor had sketched.<sup>22</sup>

Though he believed Wolff "the most influential psychological systematist among the moderns," Wilhelm Wundt (1832–1920) demurred at that metaphysical psychology in which Wolff hypostatized faculties of the mind and re-instituted a Cartesian mind-body dualism.<sup>23</sup> Nonetheless, Wundt himself procedurally adopted a Wolffian sort of psychophysical parallelism, relegating different laws and modes of inquiry to the separate realms of mind and brain.<sup>24</sup> Wundt's method, of course, directed the experimental use of fixed stimulus-situations, but with the aim of achieving control over conscious activity; behavioral responses were studied only as indices of mental processes. The essential instrument of Wundtian method remained introspection into psychological phenomena.<sup>25</sup> Moreover, Wundt did not avoid the descriptive use of the categories of faculty psychology; and in his analysis of the fundamental structure of perception, he made the familiar Wolffian distinctions concerning the contents of mental representations, the acts in which the mind represented them, and the apperception through which perceptions were brought to conscious focus.<sup>26</sup> The reverberation of Wolff's ideas across the centuries makes an examination of his psychology historically instructive.

Wolff's "Prolegomena" to his *Psychologia empirica* and *Psychologia rationalis* set forth what he took to be the basic character and uses of psychological

science. In translating these I have tried to balance a literal rendering with tolerable English. The qualities of Wolff's scholastic style, which is prolix, repetitive, and stiff, have not, I think, been obscured. Commentary and brief explanations will be found in the footnotes.

#### PROLEGOMENA TO EMPIRICAL PSYCHOLOGY

1. *Empirical psychology* is the science that establishes principles through experience, whence reason is given for what occurs in the human soul.<sup>1</sup>

\* We have already defined empirical psychology in the *Preliminary Discourse of Logic* (#111). There (#112 not.) we also indicated why we distinguished it from rational psychology.<sup>2</sup> Principles of psychology established *a posteriori* have the greatest utility for universal practical philosophy<sup>3</sup> and, indeed, for all of theology, natural as well as revealed. Since the tenets advanced by rational psychology depend upon less than obvious principles, they lead to disputes. It is preferable, therefore, to separate these more difficult truths

<sup>1</sup> This first proposition might be more smoothly translated as: "*Empirical psychology* is the science that establishes principles through experience, and so explains what pertains to the human soul (*unde ratio redditur eorum, quae in anima humana fiunt*)."<sup>1</sup> I have rendered it less freely for three reasons: first, to emphasize that Wolffian empirical psychology has the task of providing a foundation for that different sort of activity of mind proper to rational psychology; second, to preserve the multiple meanings suggested by the word "reason (*ratio*)."<sup>2</sup> Wolff, like other of the rationalists, uses this term to refer in different contexts to: a linguistic and logical event (giving an explanation), the logical structure which the essence of something exhibits (its reason), the cause of an event (its sufficient reason), a faculty of mind, and a motive for action. These and other related senses, among which Wolff easily moves, furnish the conceptual environment against which a specific usage must be interpreted. Finally, the translation offered in the text retains the trope of the original, that of occurrences *in* the mind. Wolff, as well as many psychologists presently writing, takes the spatial metaphor of introspection, internal perception, intuition, etc. rather literally; and this ought not be obscured by a translation based on current philosophical dispositions.

<sup>2</sup> In *Disc. praelim.* #112 not., Wolff characterizes rational psychology as follows: "In rational psychology we derive *a priori* from a unique concept of the human soul all of those features observed *a posteriori* to pertain to it, as well as those deduced from these observations, insofar as this is proper to philosophy."

<sup>3</sup> In Wolff's scheme, practical philosophy "treats of the use of the appetitive faculty in choosing good and avoiding evil" (*Disc. praelim.* #62). Practical philosophy comprises the sub-disciplines of universal practical philosophy, which lays out its general principles; natural law, which considers the nature of good and evil actions; ethics, which regards the relation of men's actions to natural law; economics, which deals with man as a member of smaller social groups (e.g., the family); and politics, which treats of actions within civil society. Richard Blackwell discusses the order of the sciences in Wolff's system in "The Structure of Wolffian Philosophy," *The Modern Schoolman* 38 (1961): pp. 203–218.

<sup>21</sup> Kant, *Kritik der reinen Vernunft*, A381–382, pp. 383–384; and *Metaphysische anfangsgründe der Naturwissenschaft*, A8–12, *Werke* 5: pp. 14–16. Theodore Mischel discusses Kant's reasons for denying scientific status to psychology in "Kant and the Possibility of a Science of Psychology," *Monist* 5 (1967): pp. 599–622.

<sup>22</sup> David Leary, in a perceptive article on the early development of mathematical psychology, notes that Herbart was an avid reader of Wolff's psychology. Leary suggests that Wolff's proposal may have influenced Herbart's own considerations of psychometry. See Leary's "The Historical Foundation of Herbart's Mathematization of Psychology," forthcoming in the *Jour. Hist. Behavioral Sciences*.

<sup>23</sup> Wilhelm Wundt, *Grundzüge der physiologischen Psychologie* (2 vols.; 4th ed.; Leipzig: Engelmann, 1893), 1: pp. 11–13, 15; and *Vorlesungen über die Menschen- und Thierseele* (2nd ed.; Leipzig: Voss, 1892), p. 4.

<sup>24</sup> Wundt, *Vorlesungen über die Menschen- und Thierseele*, pp. 480–491.

<sup>25</sup> Wundt, *Grundzüge der physiologischen Psychologie* 1: pp. 4–6; and "Selbstbeobachtung und innere Wahrnehmung," *Philosophische Studien* 4 (1888): pp. 291–309.

<sup>26</sup> Wilhelm Wundt, *Grundriss der Psychologie* (Leipzig: Engelmann, 1896), pp. 3, 244–245.

from those that ought to serve as their foundation. We say nothing more concerning this, since one can read about it elsewhere.

2. In empirical psychology the characteristics of the human soul are established through experience (#1); but we experience that of which we are aware (*cognoscimus*) by attending to our perceptions (*Log.* #664).<sup>4</sup> Hence *we come to know the subjects dealt with in empirical psychology by attending to those occurrences in our souls of which we are conscious.*

\* This proposition has a twofold use. First, it indicates how one should arrive at an awareness of what is taught in empirical psychology: this is useful for researchers. Second, from this proposition one can appreciate how matters treated of in empirical psychology are to be properly understood and how they can be recalled for examination. This helps those desiring to obtain for themselves certain knowledge about psychological subjects. Doubtless, to discover psychological notions<sup>5</sup> the soul must be able to elicit from itself many operations; hence occasion must exist for experiencing many things. For from those events which transpire in our soul, we gather what can occur and reduce them to determinate notions. One who wishes to have corresponding notions for terms and to be certain of their truth must try to experience in himself those things treated of in psychology, or to resolve them into such as he can experience in himself. It will be clear from this tract that we ourselves must aid this study in whatever way we can.

3. Matters considered in psychology become known through the teaching mistress experience (#1), and these are indeed singulars (*Log.* #665).<sup>6</sup> Now whatever is taught in that part of philosophy called empirical psychology (*Disc. praelim.* #111) should be set forth in accurate definitions (*Disc. praelim.*

<sup>4</sup> *Log.* #664: "We are said to *experience* whatever we are aware of (*cognoscimus*) by attending to our perceptions. Cognition of what is evident only by attending to our perceptions is called *experience*."

<sup>5</sup> For Wolff's definition of "notion (*notio*)" see footnote 8, below.

<sup>6</sup> Consistent with Scholastic doctrine, Wolff maintains that we experience only particular objects and events, not universals. But, as he observes (*Log.* #665 not.), "though we do not experience universals, we do derive knowledge of them from those things we do experience." Unlike some Aristotelians, however, Wolff does not believe that universal concepts are literally derived from sensible particulars. Though he ascribes to the mind a faculty of abstraction (*Psychol. empir.* #282), he is of the Leibnizian persuasion that concepts, being mental entities, are drawn from the resources of the soul alone, though in appropriate harmony with the requirements of sense impressions (*Vernunft. Gedank.* I: p. 6). This is the ontological view. Epistemologically considered, universal notions are the result of a comparison of perceptions of particulars, wherein a certain essential similarity is apprehended (*Psychol. empir.* #283, 326).

#116) and expressed in determinate propositions (*Disc. praelim.* #121). Hence *one who would discover the truths (dogmata) of empirical psychology should have the habit of referring what is experienced to accurate definitions and determinate propositions.* And it is clear that this habit can be acquired.

\* We offer these admonitions for a number of reasons, though principally lest someone who believes himself equal to this task, but who is not at all up to it, should attack the whole project with vain success. Thus it is easy to see why up to now psychology has been almost completely neglected and little cultivated. Accordingly, we declare that ontological notions furnish a good deal of aid in discovering psychological notions, since such ontological notions, as we show in *Marburg Leisure Hours*,<sup>7</sup> immediately elicit universal notions.<sup>8</sup>

4. *Empirical psychology supplies principles for rational psychology.* In rational psychology reason is given for what occurs in our soul (*Disc. praelim.* #58, 31).<sup>9</sup> But empirical psychology establishes principles, whence reason is given for what occurs in the human soul (#1). Therefore, empirical psychology supplies principles for rational psychology.

\* We have mentioned elsewhere (*Disc. praelim.* #111 not.) that empirical psychology is similar to experimental physics.<sup>10</sup> For it is also the case that

<sup>7</sup> As the title suggests, *Marburg Leisure Hours—Horae subsecivae Marburgenses quibus philosophia ad publicam privatamque utilitatem aptatur* (9 parts; Francofurti et Lipsiae: officina libraria Rengeriana, 1729–1732)—is a work of Wolff's exile.

<sup>8</sup> Wolff (*Psychol. empir.* #48) defines an idea as the mental representation of something insofar as that representation is considered precisely in its referential capacity, that is, objectively. When such representation refers to what several things have in common, that is, when it is a universal, he (*Psychol. empir.* #49) calls it a notion (*notio*). In *Marburg Leisure Hours* and *Psychol. empir.* #338 not., Wolff argues that general ideas, or notions, focus our attention on more specific ideas and events; and below, in *Psychol. empir.* #5 not., he argues that such notions perform the indispensable function of directing us to observations we would likely overlook.

<sup>9</sup> *Disc. praelim.* #58: "That part of philosophy which treats of the soul, I call psychology. Thus psychology is the science of whatever is possible through human souls. The import of this definition is evident from what has been discussed before. For philosophy in general is the science of possibles, insofar as they are able to exist (#29). Therefore, since psychology is that part of philosophy which treats of the soul, it is the science of whatever is possible through human souls." For a discussion of Wolff's conception of science, see footnote 2 to "Prolegomena to Rational Psychology."

<sup>10</sup> Wolff regards the relationship between dogmatic, or rational, physics and experimental physics as comparable to that between rational psychology and empirical psychology. Experimental physics has the task of establishing, through observation and experiment, the fundamental principles governing bodies, as well as the more particular laws of natural phenomena; these serve as the starting points for the explanations of dogmatic physics and the verificational standards

experimental physics supplies principles for dogmatic physics. And just as one who lays great stress upon and cares about true knowledge of natural things ought to work unstintingly in experimental physics, so it is necessary that one who desires certain knowledge of the soul should be assiduous in empirical psychology. Indeed, if empirical psychology is correctly cultivated, it will be obvious, as indicated by our progress, that much more can be certainly known about the human soul than commonly thought.

5. *Empirical psychology serves to examine and confirm discoveries made a priori concerning the human soul.* Since subjects dealt with in empirical psychology are known through attention to those occurrences in our soul of which we are conscious (#2), discoveries made *a priori* about the human soul should be compared with what empirical psychology establishes through experience. And if the former are the same as the latter, that is, if they agree, then no one will be able to doubt the truth of such discoveries; but if these are contrary to what is established through experience, we can be sure that they are simply not true (*Log.* #567).<sup>11</sup> Though, if something demon-

for its deductions. Likewise, experimental psychology provides observed facts and relations concerning the soul, upon which rational psychology bases its principles of demonstration and tests of validity. Wolff's understanding of the relationship between experimental and theoretical aspects of a discipline, as indicated in *Psychol. empir.* #5, is sophisticated and has a distinctly contemporary sound. For further remarks concerning Wolff's conception of the analogy between physics and psychology, see footnote 5 to "Prolegomena to Rational Psychology."

<sup>11</sup> *Log.* #567: "If we observe the subject to agree with the predicate, we are certain of the proposition. For if we observe the subject to agree with the predicate, we recognize the proposition to be true (#517), and so we know that it cannot be false (#566). Therefore we will be certain of the proposition." This proposition, of course, is itself little better than a tautology, drawing out merely the meaning of what it is to observe something to be truly the case. But behind it is Wolff's theory of the intuitive judgment (*judicia intuitiva*), the conception by which he joins empirical and rational methods. Intuitive judgment concerns particular objects and their experienced properties (*Log.* #699). His task is to explain how one can produce universal and certain knowledge from intuitive experience of particulars. He develops his theory (*Log.* #671-687) by showing—much as Husserl would later recommend as part of the phenomenological method—the ways to decide whether what is perceived of an object is part of its essence or a necessary attribute (e.g., the object cannot be thought without it), or is merely a contingent mode (e.g., the object at one time possesses the property and at another time does not; or another object of the same species lacks the property). Modal changes in an object, he argues (*Log.* #696-697), must find their sufficient reason, or cause, in other objects. These causal relationships can be determined if one carefully observes, in Baconian fashion, the conditions under which modes are present and absent (*Log.* #697-698). The techniques for making these discriminations are the very means for raising judgments about particulars to universal validity (*Log.* #705-709). Wolff recognizes, however, that obscure and inadequate perceptions

of the soul *a priori* has not yet been recognized in empirical psychology, our attention should be directed to our mind and focused upon that which ought to correspond to the *a priori* discovery, so that it becomes clear whether it agrees with the *a priori* discovery or not. But if it happens that something cannot be reduced to observation, then one can see whether it is the same as that which follows from a principle established in empirical psychology, or whether from what is discovered *a priori*, something established in empirical psychology should follow. Clearly, therefore, empirical psychology serves to examine and confirm discoveries made *a priori*.

\* Empirical psychology is similar to experimental physics; for we use experiments—either directly or by deducing something from them—to examine the tenets of dogmatic physics. Rational psychology considers those matters which we come to know *a priori* about the soul (*Disc. praelim.* #58, 111). Rational psychology obviously expands the space of empirical psychology, while borrowing principles from it: it returns with interest what it has borrowed. Certainly it does not seem impossible to derive something *a posteriori* from observation without the aid of rational psychology; but, as a matter of fact, we claim it cannot be done easily. Attention, without which we cannot avert to what is in the soul, alone is insufficient for observation of such things. Truths deduced *a priori* warn us about what we ought to observe and what otherwise escapes our notice. Such truths show us the way, and without them we cannot become conscious of what is occurring in us. We speak from experience, as those who are involved in familiarizing themselves with psychological notions will learn. In this instance the psychologist imitates the astronomer, who derives theory from observations and corroborates theory through observations, and who, by the

will permit only probable or even erroneous judgments (*Log.* #688-695). But he is confident that cautious observations can produce the required clarity and thus yield necessary and universal propositions from experience. Blackwell (in "Christian Wolff's Doctrine of the Soul," pp. 342-343) believes the ultimate foundation for Wolff's bridge between perceptual judgment and rational certainty is his acceptance of Leibniz's thesis that every true proposition has its predicate analytically contained in the concept of the subject.

Wolff's method of intuitive judgment has a special application in the perception, or rather apperception, of mental occurrences. Because of our necessary apperceptive acquaintance with all of our cognitive acts, he is convinced that we are able through direct introspection to bring propositions concerning the mind to intuitive certainty. This is the advantage, as he means to suggest in the argument of *Psychol. empir.* #5, that empirical psychology has over rational psychology: it is not liable to the mistakes attendant on the often long and complex reasoning involved in purely rational procedures. See the introduction to this translation and footnote 10 of the "Prolegomena to Rational Psychology" for further comments on Wolff's conception of the certitude of empirical psychology.

aid of theory, is led to observations which he otherwise might not make. And thus the demonstrations of rational psychology suggest what ought to be considered in empirical psychology. And wherever empirical psychology is established and rational psychology cultivated, we are enriched by many principles which otherwise would have to be secured with great difficulty. Thus the best thing is for one constantly to join the study of rational psychology with that of empirical psychology, even though we have considered it wise to treat them separately.

6. *Empirical psychology provides principles for natural law.* In natural law there are demonstrations of what actions are bad and what good. This is evident from what has been said concerning natural law and the law of nations (*jure naturali & gentium*)<sup>12</sup> in *Marburg Leisure Hours*, and in time it will be more patently demonstrated in universal practical philosophy. It will be apparent from the very system of natural law that the reason for actions, what makes them good or evil, is selected by human nature and, consequently, by what characterizes the human mind. But those features of our soul of which we are conscious are considered in empirical psychology (#2); and it is obvious that from these, reasons must be selected for intrinsically good or evil actions. Empirical psychology, therefore, provides principles for natural law<sup>13</sup> (*Ontol.* #866).

\* Natural law pertains primarily to the duties of man to his own soul.

7. *Empirical psychology serves natural theology and provides principles for it.* In natural theology we treat of God and his attributes (*Disc. praelim.* #57). We show in natural theology, however, that we come to notions of the divine attributes insofar as we free notions about the human mind from imperfections, that is, from limitations. Since empirical psychology examines those distinct notions of things the mind can be conscious of in itself, it aides the cultivation of natural theology by forming notions about divine attributes. Hence it serves natural theology.

Moreover, since in empirical psychology, as we just mentioned, the distinct notions of things occurring in the human mind are examined, one can abstract

<sup>12</sup> In *Jus gentium* (Francofurti et Lipsiae, 1749), Wolff argues that just as the actions of individuals are governed by natural law, so also the behavior of nations is ruled by natural principles of right conduct.

<sup>13</sup> Psychology and "moral philosophy"—the latter defined, as Dewey suggests, as "all the social disciplines as far as they are intimately connected with the life of man and as they bear upon the interests of humanity"—have traditionally been linked. Wolff considerably reinforced this relationship, which as late as the first part of this century was still quite strong. See John Dewey's "Foreword" to the Modern Library edition of his *Human Nature and Conduct* (New York: Random House, 1930).

from them general principles applicable to every being that has a certain similarity to the soul—as much similarity as is sufficient to constitute the genus (*Log.* #710), that is, the genus of spirit. Thus, since God is a spirit, which will be demonstrated in natural theology, these principles can be applied to him (*Log.* #346). Hence empirical psychology provides principles for natural theology.

\* From these considerations it is clear that natural theology would labor under many deficiencies were not empirical psychology cultivated properly. The more you become versed in empirical psychology, the more light you will see shed on natural theology. The notions of the divine attributes become distinct and determinate, and hence useful in reasoning: this is something having multiple uses not only in all of practical philosophy and experimental natural theology,<sup>14</sup> but also in revealed theology.

8. *Empirical psychology provides principles for practical philosophy.* We already demonstrated this (*Disc. praelim.* #92) when we showed that practical philosophy should seek its principles from metaphysics. If all this must be demonstrated, then see the passage referred to.

\* Indeed, there is no other reason than the neglect of empirical psychology that, especially in ethics, the practical consideration (*praxis*) of virtues which should be cultivated and vices fled has been utterly abandoned. Whatever can be said of *praxis* relates to the determination of appetite. But every perception influences the determination of appetite. Hence, those principles established in psychology concerning the determination of appetite are brought into ethics as special cases. Every philosophy of mores puts on a rather different face when illuminated by the light of psychology; there, at last, judgment can become certain about what virtues should govern and about what prevents us from cultivating them. Indeed, what we show in moral philosophy can be applied in moral theology, and should be. Books written on moral philosophy are sterile, except where they show knowledge of psychology and direct the mind to explain the subject systematically—something I have mentioned more than once. But these things will be understood more clearly when we will have deduced *a priori* the system of moral philosophy from the principles of psychology.

9. *Empirical psychology provides principles for logic.* We demonstrated this when we showed what principles logic should have (*Disc. praelim.* #89). This work should be consulted.

\* Indeed, if you wish to explain *a priori* the rules of logic, you must return to those matters concerning

<sup>14</sup> This branch of natural theology is called experimental (*Theologia naturali experimentalis*) because its principles are experientially derived.

the faculty of cognition that are treated of in psychology. Hence in order to treat of logic by the demonstrative method, we have considered the three operations of the mind,<sup>15</sup> the formal differences of notions, and the use of terms—all of which have their proper place in psychology. And generally you see that throughout logic, principles are borrowed from empirical psychology. The more deeply you look into the human mind in psychology, the more light you will see spread on logic. Many other things can be better treated through use of empirical psychology, but these should suffice to persuade those to cultivate psychology who have interest in and desire for certain knowledge both of God and of themselves and also for the study of virtue. For this reason it seemed good to repeat some things that could be supposed from the *Preliminary Discourse*.

10. *The study of empirical psychology perfuses the mind desirous of knowledge with much pleasure and furnishes a capacity for pleasure which the mind would not otherwise have.* For empirical psychology treats of those occurrences in our soul of which we are conscious (#2). Thus, since the mind desirous of knowledge perceives pleasure from acquired cognition, it ought especially to perceive pleasure from certain cognition of itself. Consequently, since certain cognition of the soul is acquired from empirical psychology (*Log.* #567), it ought to perceive pleasure from psychological study.

In empirical psychology we come to know the principles, whence reason is given for what occurs in the human soul (#1); but the reason for those aspects characterizing a being, or able to characterize it, is sought ultimately from the essence (*Ontol.* #168). We recognize in it, first, what the essential features are, then what is explained by them. But surely it is evident that one who knows what characterizes the human mind can judge more correctly about its perfection than one who is ignorant of these matters. Thus, since it is shown below that from the sense of perfection a pleasure is perceived, and is the greater the more deeply you examine the perfection, through psychological study the mind of man is given a capacity for pleasure which would otherwise be less.

In *Marburg Leisure Hours* we showed that the pure pleasure which is most appropriate for men is that perceived in the knowledge of truth, both natural and revealed, and of virtue, both natural and Christian. Thus the study of psychology is undertaken that we might perceive this pleasure more fully and clearly. Since the true happiness of man, which falls to his lot on this earth, consists in the perception of such pleasure—which we will demonstrate

in due time in universal practical philosophy—it is of some moment that a sound knowledge of empirical psychology be had. Indeed, this tract will establish that it is not impossible for us to obtain certain fruitful knowledge of the human soul. It will show the common prejudice to be false, that the immateriality of the soul prevents us from knowing something positive about it.

#### PROLEGOMENA TO RATIONAL PSYCHOLOGY

1. *Rational psychology* is the science of whatever is possible through the human soul.

\* We offered this definition of psychology as part of the definition of philosophy in the *Preliminary Discourse* (#58),<sup>1</sup> where we pointed out (*Disc. praelim.* #112) that it accorded with the distinction to be made between rational and empirical psychology.

2. Since rational psychology is a science (#1) and since science consists in the habit of demonstrating what we affirm or deny (*Log.* #594),<sup>2</sup> *whatever is proposed in rational psychology must be demonstrated.*

\* If we assume rational psychology to be a science, which we will soon show can be assumed, then certainly we must also concede that its purpose is to furnish demonstrations. When you rest content with knowledge of the soul *a posteriori*, you remain satisfied with empirical psychology, which we recently explained in the volume devoted to it; you do not advance to rational psychology, but leave it untouched. You thus fail to complete all parts of philosophy, whose aim is to provide the reason for whatever exists (*Disc. praelim.* #46). Therefore, those of us who intend to do philosophy ought to try, as much as we can, to exhibit the connecting links in demonstrations of those matters we wish to consider, so as to fill in any gaps we might detect. The noblest part of philosophy works toward this goal.

3. *Rational psychology should seek its principles of demonstration from ontology, cosmology, and empirical psychology.* Only definitions, indubitable experiences, axioms, and propositions already demonstrated are assumed as principles of demonstra-

<sup>1</sup> For this definition, see footnote 9 to "Prolegomena to Empirical Psychology."

<sup>2</sup> *Log.* #594: "If one knows how to demonstrate a proposition, he is said to *know* (*scire*) it. And thus *science* (*scientia*) is the habit of demonstrating what we affirm or deny." Wolff does not conceive science, or knowledge strictly taken, as an empirical quest or an experimental verification of hypotheses. These are but adjuncts to science. For Wolff, who borrows elements of his conception from Aristotle, Descartes, and Leibniz, science is a power of the mind, a habit of demonstrating propositions from indubitable premises. The subject of scientific demonstration is *possibles*—things, occurrences, or connections that can exist. The aim of demonstration is both to expose the necessary connections of possibles (using the principle of non-contradiction) and to give the sufficient reason why one possible is realized, or made actual, rather than another.

<sup>15</sup> The three basic operations of the intellect are simple apprehension, judgment, and reasoning (*Psychol. empir.* #325–424).



tion (*Log.* #562). But empirical psychology, as is evident from our treatise on this subject, provides definitions of what pertains to the soul and establishes principles that have been manifested through experience (*Psychol. empir.* #1). Therefore, rational psychology should seek principles of demonstration from empirical psychology. This was the first thing to be proved.

Further, the human soul actually exists (*Psychol. empir.* #21)<sup>3</sup> and is numbered among beings (*Ontol.* #134). Thus whatever is demonstrated of being in general can be applied to the soul, since it is a species of being (*Psychol. empir.* #360, 361). Therefore, since those things which come to be predicated of being in general are demonstrated in ontology (*Ontol.* #1), rational psychology takes principles of demonstration from ontology. This was the second thing to be proved.

Finally, the soul perceives bodies as alterations in the sense organs, insofar as these alterations are appropriate to particular organs (*Psychol. empir.* #67).<sup>4</sup> The faculty of imagination (*Psychol. empir.* #91, 92) and other faculties of our mind (*Psychol. empir.* #237, 257) depend upon this faculty of sensation.<sup>5</sup> Indeed, changes of mind depend upon

changes in our body (*Psychol. empir.* #948), and conversely, activities of our body depend upon the volition of our soul (*Psychol. empir.* #953).<sup>6</sup> There-

As with so many other psychological concepts, Wolff, while not the first to refer to "faculties of the soul," constructed a systematic account of them and gave currency to their use in psychology. According to Wolff, a faculty is an active power through which something is able to perform an action. Such "potentiae activae," as he explains them (*Ontol.* #716 not.), "imply that in the subject features exist through which actions are able to be distinctly explained, so that one might understand how they were able to occur." Thus to understand the activities of any object, one must first appreciate that the object has the ability to perform such actions; and for Wolff, this is a matter of coming to comprehend the essence of the object. In the case of the soul, its essence, whence its various activities are made possible, consists in that "force (*vis*) of representing the universe, a force which is situated materially in an organic body and which is limited formally by the constitution of the organs of sensation" (*Psychol. rat.* #66). The force which the soul embodies is the sufficient reason for its actions (*Ontol.* #722). Thus the faculties of the soul—e.g., faculties of sensation, imagination, understanding, etc.—are attributed to the soul "because it is possible that such are actuated through the force, which is subject to diverse laws" (*Psychol. rat.* #81).

As the last quotation suggests, Wolff recognizes that explanatory reference to the "perceptual faculty," for example, is incomplete, until laws are distinguished which might account for the precise character of perceptual abilities. The situation of psychology is thus no different from that of physics: the capacities of the soul, just as the capacities of physical bodies, are realized in the expression of that force which is governed by determinate laws. The analogy between physics and psychology in this respect and the need in both to refer to specific laws in producing explanations are made clear in *Psychol. rat.* #529 not.: "Indeed, when the explanation (*ratio*) of corporeal phenomena is given from their structure, the explanation must also include the laws of motion; so likewise the laws of sensation, imagination, intellection, and appetition must be referred to when the explanation for those things which pertain to the soul is given from the force of representing the universe."

<sup>6</sup> Wolff believes that any theory about the specific relationship between body and soul has to remain only probable, since analysis of the concepts of these does not reveal the precise nature of their connection (*Psychol. rat.* #540, 541). Nonetheless, he is convinced scientific *experience* does show that the body and soul act in harmony, that, for instance, sensible ideas in consciousness are paralleled by material ideas, or configurations of the brain. Wolff scrutinizes the prevailing theories of the mind-body relationship to test their likelihood. He finds that the Aristotelian hypothesis of interaction between mind and body requires the empirically empty supposition of an occult force passing between them (*Psychol. rat.* #558–587), and that the Cartesian belief in occasionalism assumes the continued active intervention of God in nature—a theory which confounds the divine and the natural, demands perpetual miracles, and leaves the natural scientist with no understanding of the sufficient reason for natural phenomena. Wolff's own preference is for the Leibnizian hypothesis of pre-established harmony between body and soul (*Psychol. rat.* #612–642). According to this conception, the corporeal and mental realms do not interact, but each produces its own events (e.g., a chain of cerebral excitations or a logical sequence of ideas) by reason of the forces operative respectively in each. The key assumption

<sup>3</sup> In *Psychol. empir.* #20, Wolff defines soul as "that being which in us is conscious of itself and of other things outside of us." Then in *Psychol. empir.* #21, he offers this demonstration of the existence of the soul: "Insofar as we are conscious of ourselves and of other things beyond us (#14), we exist. But insofar as we are conscious of ourselves and of other things beyond us, we are soul (#20). Therefore our soul exists." Fundamentally this is Descartes's argument: in order to think, to be conscious, or to doubt, one must exist; but what performs these acts is called soul or mind. The identification of the person with his mind might be thought a hindrance to the development of physiological psychology. Yet it did not prevent Descartes from giving impetus to just such a project with his *Traité de l'homme* (ca. 1633) and *Les passions de l'âme* (1664). Nor does Wolff fail to recommend the pursuit of neuro-physiology. He is convinced that all sensible ideas, images, symbolic representations, and desires (though not abstract ideas) are paralleled by cerebral activity (*Psychol. rat.* #113, 206, 394, 503), and so argues that material "ideas" of the brain can provide sufficient reason for immaterial ideas of the mind (*Psychol. rat.* #618). Wolff considers psychological issues in *Vernünftige Gedanken von dem Gebrauche der Theile in Menschen, Thieren und Pflanzten* (Francofurti et Lipsiae: officina libraria Rengeriana, 1725). For further comments on Wolff's theory of psychophysical parallelism, see footnote 6, below.

<sup>4</sup> *Psychol. empir.* #67 not.: "The more attentive will easily perceive why we add this restriction. For extrinsic causes can produce in a sense organ changes which little depend on the structure of the organ: for instance, when a wound is inflicted on the eye or the eye is bruised. For a wound or contusion is not a change which happens to the eye by reason of its organic structure or insofar as it is an organ appropriate for vision."

<sup>5</sup> In *Psychol. empir.* #237 and 257, Wolff shows that the faculties of attention and reflection operate on perceptions, and thus depend upon them.

fore, since cosmology treats of the general features of the world, or corporeal universe (*Cosmol.* #1), as well as of the theory of bodies (*Cosmol.* #119 & seqq.), principles of demonstration are also sought from cosmology. This was the third thing to be proved.

Now the soul is a particular species of being, as we have just demonstrated, and is simple, as we will show below. Since we know of no genus more proximate than simple being, that is, simple substance, nor more remote than being,<sup>7</sup> we assume no theory other than that of being in general (*in genere*) and simple being in particular (*in specie*). Since in ontology we treat of the theory of being in general and of simple being (*Ontol.* #132 & seqq., 673 & seqq.); and since in empirical psychology we treat of what we observe *a posteriori* to distinguish the soul specifically from all other simple beings (*Psychol. empir.* #1); and since the relationship of soul to body should be evident from the theory of body in general and the general theory of the world—insofar as the world consists of lesser bodies—all of which is treated in cosmology<sup>8</sup> from principles which have been demonstrated: therefore it is not necessary for us to borrow principles from any other disciplines than ontology, cosmology, and empirical psychology. This was the fourth thing to be proved.

\* And this is the reason why we should consider ontology, cosmology, and empirical psychology before rational psychology (*Disc. praelim.* #87).

4. *In rational psychology reason must be given for whatever occurs in the soul or can occur in it.* For rational psychology is that part of philosophy concerning itself with the soul (*Disc. praelim.* #58, 112). Therefore reason must be given for whatever actually occurs in the soul or can occur in it (*Disc. praelim.* #31).

of this view, of which Wolff is mindful, is that God has pre-established the two orders to act in a harmonious and finely coordinated way. The chief advantage which he finds in this hypothesis is that it offers the natural scientist the means to discover the sufficient reason for change in one order by observation and analysis of events in the other.

<sup>7</sup> In the Scholastic logic, which Wolff's own logic reflects, genus and species are relative designations classifying an object in respect of its essential features and its relations to other objects sharing those features. For example, man can be defined using genus-species designations to show his pedigree: man is a being, composed, living, animal, and rational. Each note places him in a species with regard to a higher genus. To call man a "rational animal," then, is to define him by showing his genus (i.e., animal and, by implication, the higher genera) and his species, or specific difference (i.e., rational).

<sup>8</sup> What we can know of the body-soul relationship is also discussed from the perspective of cosmology, since it deals with the different aspects of the theory of bodies. Wolff, however, does not think the relationship yields completely to scientific analysis. See footnote 6, above.

\* Elsewhere (*Disc. praelim.* #112) we have shown this to distinguish rational from empirical psychology, though the distinction is evident from a comparison of the two. Further, the seriously attentive reader doubtless understands that no less evident reasons can be given for what pertains to the soul than are usually given in modern physics for material objects.

5. *Rational psychology is possible.* In rational psychology reason is given for whatever occurs in the soul or can occur in it (#4). Now since the human soul actually exists (*Psychol. empir.* #21) and is a being (*Ontol.* #134), certain features characterize it which are neither mutually repugnant, nor determined through other features simultaneously present, nor determined through one another (*Ontol.* #142). Consequently the soul has an essence (*Ontol.* #143), and this essence contains the sufficient reason for those things beyond itself which constantly occur in the soul or can occur in it (*Ontol.* #167).<sup>9</sup> Therefore rational psychology is possible (*Ontol.* #91).

\* We add this proposition so that rational psychology, as we define it, will not be thought an empty term (*Log.* #38) and that the effort expended in its pursuit will not be regarded as vain. Certainly the very notion of possibility establishes how rational psychology must proceed. We must form a certain essential concept and from it derive *a priori* whatever we establish in empirical psychology *a posteriori*.

<sup>9</sup> In Wolffian ontology, the concept of "being" is of that which can exist. Whether a being is merely possible and we do not suppose it to exist (e.g., a gold mountain, a five-headed dog) or does actually exist (e.g., the current president of the United States)—in either case the concept is that of a possible which has an intrinsic core, an essence, and particular attributes and modes (*Ontol.* #143, 146, 148). According to Wolff (*Ontol.* #142), there are certain necessary features of the essence of any being: the essential components must not be mutually repugnant, nor must they be determined through anything else, nor through each other. The essence of man is constituted by the components *rational* and *animal* (while *animal* itself is a complex component; see footnote 7, above). These components are not mutually repugnant (as the essence of a square circle would be). Nor does the fact that a being is an animal necessarily determine it to be rational. If it did, then, in Wolff's scheme, the component *rational* would not be a part of the essence, but an attribute of it (as, for example, *three-angled* is an attribute of a triangle because it is determined by the triangle's essential character of being a three-sided plane figure). For the same reason, were the components of the essence determined by something else, they would not be the logically first things conceived of the substance; but this is what is meant by the essence of a substance—that through which other features are logically derived. Wolff's model here, as suggested by his examples, is that of geometrical figures, from whose essential definitions, a multitude of properties can be logically deduced. This ontological theory founds the possibility of rational psychology, which aims to derive the attributes of the soul from an examination of its essential character.

We can reach this goal if we ponder those aspects of the soul observed in empirical psychology and inquire after the significance of the distinct notions there unfolded in order to determine which of them can be demonstrated from others. Indeed, we used this method in constructing rational psychology, while subjecting ourselves to the scrutiny of very able men.

6. *No error committed in rational psychology creeps into natural theology, logic, or practical philosophy.* Now rational psychology gives the reason for whatever occurs in the soul or can occur in it (#4). Since these subjects are taught in empirical psychology (*Psychol. empir.* #2), nothing is attributed to the soul in rational psychology except what is shown concerning it in empirical psychology through indubitably faithful experience.<sup>10</sup> Therefore, when an error occurs anywhere in rational psychology, we do not ascribe to the soul what does not occur in it, or worse, what cannot occur in it. Rather we give a spurious reason for what occurs or can occur in the soul, that

<sup>10</sup> Wolff believes that rational psychology cannot wander far in error, because its analyses are based in and corrected by the indubitable propositions of experimental psychology. In experimental psychology, the objects of observation are the acts of one's own mind, about which one can have perfect certitude. For in the perception of an object, we are able concomitantly to apperceive, or observe, our own perceptions, since to perceive things with any clarity is simultaneously to be consciously aware of the perceptions themselves (*Psychol. rat.* #20). In this way indubitable experiential knowledge is achieved of the soul's own actions; for virtually by definition, the conscious mind must be transparent to itself. Wolff demonstrates this in *Psychol. empir.* #28: "We achieve knowledge of the mind by attending to our cogitations and then attributing to it those traits derived through valid reasoning from these cogitations. Since cogitations involve perceptions and apperceptions (#26), when we think (*cogitamus*) we represent to ourselves either something regarding ourselves or something different from ourselves (#24); and we are conscious of its representations (#25). Thus if we attend to our cogitations, we thereby note not only how the object is represented, but also what sort of change occurs in our soul. And thus we arrive at knowledge of the soul."

Kant reveals his rationalistic heritage when, in the preface to the *First Critique* (Axx, *Werke* 2: p. 18), he displays a similar sanguinity about reason's ability veridically to observe itself: metaphysics in his conception, as he declares, "is nothing other than the inventory of all our possessions through pure reason, systematically arranged. Here nothing can escape us, because what reason derives completely from itself cannot be hidden. As soon as one has discovered its common principle, reason itself brings it to light." Kant, of course, is much more hesitant about the validity of our perceptions of external objects. Such perceptions, however, posed few problems for Wolff, undoubtedly because he assumed, with Leibniz, that the material world is composed of aggregates of simple, unextended substances (*Cosmol.* #176, 182) and that our perceptions of sensible characteristics are harmonious but confused ideas of these (*Psychol. rat.* #92-110, 143-149)—that is, such characteristics have only phenomenal reality. Kant, of course, found little warrant for the assumption of simple substances to which confused ideas were harmoniously related.

is, we incorrectly demonstrate a proposition established *a posteriori* to be true. Indeed, we use as principles of demonstration propositions which have not been demonstrated (*Log.* #562). Thus, if an error is committed in rational psychology, no harm is done to the principles which empirical psychology supplies to natural law, natural theology, practical philosophy, or logic (*Psychol. empir.* #6 & seq.), and no error creeps into these disciplines.<sup>11</sup>

\* Some through ignorance dream that because error does crop up in rational psychology, it threatens to destroy virtue and justice in the state.<sup>12</sup> But their fear is groundless, and we offer the present proposition to dispel it. Does anyone fear that the human race will perish, with men no longer born, because the theory of generation discussed in physics fails to be true? Up to the time of Harvey, the hypothesis was held that man was generated from the mixture made by the soul of the masculine and feminine seeds, which were supposed to be formless masses. But this hypothesis is hardly true, though even today many physicists do not admit it.<sup>13</sup> Yet this situa-

<sup>11</sup> Wolff is confident that any errors occurring in rational psychology do not infect other disciplines, because of the prophylaxis of empirical psychology. The fundamental properties of the soul are discovered through empirical psychology, which, as discussed in the previous note, has the safeguard of indubitable experience. Empirical psychology furnishes to rational psychology the explananda of its demonstrations, as well as the premises. Both sorts of propositions are thus immediately derived from certain experience; their truth does not depend on the conclusions of other demonstrations. Moreover, as shown in *Psychol. empir.* #5, the demonstrations of rational psychology are continually monitored by empirical psychology to test conclusions against experience.

<sup>12</sup> École ("Variantes et notes," *Gesammelte Werke*, II. abt., band 6, p. 706) suggests that Wolff is here alluding to the theologians Joachim Lange and Johann Franz Budde, of Halle and Jena respectively, who believed that Wolff's theory of the soul, since it was based on the doctrine of pre-established harmony, was destructive of religion and morality.

<sup>13</sup> Up to the seventeenth century, Aristotle's theory of epigenesis was the commonly accepted account of generation. This theory assumed that neither the male nor female seed had preformed parts, but that the organs of the foetus arose sequentially from homogeneous matter. William Harvey (1578-1657) adopted this theory, with some modifications, in his *De generatione animalium*. However, when Antony van Leeuwenhoek (1632-1723) turned his microscope on the spermatozoa of animals, he discovered therein preformed miniatures, whose parts required only the maternal environment in order to unfold. Jan Swammerdam (1637-1680) further elaborated this theory of evolution (as it came to be called), dismissing epigenesis as the product of inadequate empirical investigation. Leibniz (*Monadologie*, 73-78) found the *a posteriori* claims of the microscopists to agree with his *a priori* conclusions about the non-generability of simple substances (e.g., souls) and the pre-established harmony of body and soul. Wolff shared Leibniz's views, holding that "the soul pre-exists in the pre-existing organic corpuscles from which foetuses are formed in the womb" (*Psychol. rat.* #704). In the controversy between

tion has not prevented human births, something to which experience attests.

7. *What is taught in empirical psychology is more completely and properly understood through rational psychology.* In rational psychology, reason is given for whatever occurs in the soul or can occur in it (#4). Since why something exists rather than not is understood through reason, what is taught in empirical psychology is more completely understood in the considerations of rational psychology. This was the first thing to be proved.

The person who knows why something exists rather than not perceives most clearly whether a predicate, which experience shows is linked to some subject, must be attributed to that subject by reason of the definition, by reason of some added condition, or because certain accidental determinations supervene (*Ontol.* #130 and *Psychol. rat.* #4).<sup>14</sup> Rational psychology teaches us the constraints limiting our assignment of predicates to the soul. One should not, therefore, fear that an unsuitable predicate would ever be attributed to it. Hence what is taught in empirical psychology is better understood through reason. This was the other thing to be proved.

\* It is necessary that we show the utility of rational psychology<sup>15</sup> so that it is not utterly condemned, but understood as worthy of cultivation. Concerning its utility, I refer principally to the fact that through it doctrines regarding the soul may be more completely and properly understood. Neither of these advantages is to be despised. Indeed, the first satisfies the mind desirous of knowledge, so that it rests in recognized truth; for truth and correspondence provide the mind greater assurance. The second promises release from fear of any error arising from an improper application of the principles of psychology. I admit I have assumed rational psychology to have this utility only when it hits right on the truth.

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spermists and ovists, he sided with the former (*Psychol. rat.* #706), though he thought reasoning *a priori* allowed one to maintain only the necessity of preformation, leaving to empirical evidence to indicate whether sperm or egg is repository of the homunculus.

<sup>14</sup> Wolff's argument is simply that the person who really knows why some proposition is true must be able to demonstrate this by showing whether the conjunction of subject and predicate in the proposition is due to the definition (e.g., a triangle has three angles as a necessary consequence of its definition as a three-sided figure), or to a special circumstance (e.g., the opposite angles of a quadrilateral must be equal to two right angles, *if* the quadrilateral is inscribed in a circle), or to a contingent circumstance (e.g., wax is soft, *if* it happens to be in the sun). This is what it means truly to know something, and this is the special province of rational psychology. Put another way, empirical psychology shows *that* something is true of the soul, and rational psychology explains *why* it is true. Hence rational psychology adds a dimension of deeper understanding.

<sup>15</sup> The text reads "Psychologiae empiricae," but this is clearly an error.

8. *Rational psychology increases our acumen for observing what occurs in our soul.* In rational psychology reason is given for what occurs in the soul or can occur in it (#4). Thus, in explanation, if we run into any difficulty, we inquire after and turn our mind to whatever occurs in our soul, whether the occasion for such observation is spontaneous or contrived by experiment. Consequently we become aware of those features of our soul which bring themselves to our attention. Thus we then distinguish many more features than before, and so our acumen is perfected by the study of rational psychology. Likewise, since in rational psychology we deduce from what is observed in our soul other things not yet known through experience, we turn our mind once more to attempt to verify through experiment what occurs in it; and what we had no reason to consider before (*Ontol.* #70) is now brought to our attention. Thus as previously, it is clear that our acumen for observing what occurs in our soul is increased.

\* If we experience this for ourselves, we will be convinced that this entire proposition is true. Those who have occupied themselves with astronomy or who have investigated experimental philosophy by our method, since they have experience in these enterprises, will transfer the method to psychology when they consider its universality. The utility, therefore, which the present proposition suggests is indeed excellent. For it is clear that we should credit rational psychology with what we know of the soul and what we grasp with firmer assent. It is through rational psychology that we penetrate to deeper knowledge of the soul, an avenue open to no other means. How much help this acumen brings to moral philosophy will be made plain in its proper place.

9. *Rational psychology discloses features of the soul which are closed to observation alone.* In rational psychology reason is given for what occurs in the soul or can occur in it (#4), and so in rational psychology propositions become determined (*Log.* #320) and consequently fit for use in reasoning (*Log.* #499 & seqq.). Thus, since through the art of discovery unknown propositions are derived from known (*Psychol. empir.* #461), the soul learns things which cannot be disclosed *a posteriori*. Therefore rational psychology discloses matters which were closed to observation alone.<sup>16</sup>

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<sup>16</sup> According to Wolff (*Psychol. empir.* #425-463), the art of discovery is a habit of mind, acquired through practice, of deriving the unknown from the known. This can be the discovery of hitherto unknown truths either *a posteriori* or *a priori*. The former depends upon the cultivation of precise observation and exacting experiments; the latter requires continued practice in reasoning until our natural disposition for reasoning is sharpened and perfected. For a discussion of Wolff's theory of discovery, see Charles Corr's "Christian Wolff's Treatment of Scientific Discovery," *Jour. Hist. Philos.* 10 (1972) : pp. 323-334.

\* Since our acumen for observing what occurs in our soul is increased through rational psychology

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The conclusion Wolff reaches in *Psychol. rat.* #9 is not that rational psychology discovers features of mental processes which are *in principle* closed to introspection; for, as he argued previously (*Psychol. rat.* #6), "nothing is attributed to the soul in rational psychology other than what is evinced concerning it in empirical psychology through indubitably faithful experience." Rather, Wolff wishes to emphasize that rational psychology leads the observer to features of the soul that would otherwise go unnoticed.

(#8), it can happen that matters rational psychology detects *a priori*, because they have become evident, are now more open to observation; for we find it easier to observe what has become evident than what is completely unknown. Therefore, one cannot deny that rational psychology helps to enrich psychological knowledge. Indeed, if anyone should wish to compare matters treated in the following sections with what we have exhibited in empirical psychology, he will be given insight into his beliefs (*oculatam habebit fidem*).