

Epistemics of the soul: Epistemic logics in German 18th-century empirical psychology

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Abstract

This article examines epistemic logics in 18th-century German empirical psychology and distinguishes three basic patterns at play throughout the century. First, as empirical psychology was introduced in the 1720s, it relied on the Aristotelian-scholastic conception of experience as universal and evidently true propositions of how things typically behave in nature. Empirical psychology was here a matter of defining and demonstrating the general nature, structure, and functions of the soul by referring to experiences that most people could recognize as universally and evidently true. Second, around midcentury this logic was challenged as a new generation of philosopher-physicians launched an empirical psychology based on extraordinary medical cases. Rather than focusing on the general and universal, this new strand of case-based empirical psychology charted the individual, unique and often abnormal. Third, from the early 1770s, the interest in the individual was complemented by a new discourse on psychological method. Adopting the epistemic techniques developed within natural and experimental philosophy, empirical knowledge of the soul was seen as the result of rigorously conducted singular observations that were frequently

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repeated and carefully documented and analyzed. Rather than replacing one another sequentially, these three epistemic logics should be understood as cumulative. That is, despite sometimes profound differences, each new logic was layered on top of the existing ones, thereby broadening and increasing the epistemic complexity of empirical psychology.

KEYWORDS

early modern psychology, empirical psychology, medical cases, observation, psychological method, self-observation

1 | INTRODUCTION

In recent decades historians have challenged established historiographies by showing that 18th-century psychology, far from being some premature and marginal theoretical outgrowth of philosophy, was an extraordinarily complex, broad, and highly eclectic enterprise (Araujo et al., 2021; Heinz, 1996; Klempe, 2020; Leventhal, 2019; Rudolph & Goubet, 2004; Vidal, 2011). Whereas some studies have examined different schools and strands of thought, others have charted broader cultural and intellectual contexts. This article is indebted to both lines of research but shifts focus from disciplinary and intellectual history to the study of epistemic categories, techniques, virtues and genres, an approach originating in history of science (Daston & Galison, 2007; Dear, 1995, 2006a, 2006b; Shapin, 1994; Shapin & Schaffer, 1985; Shapiro, 2000). I use the concept of *epistemic logics* as an umbrella term for this type of analysis. By epistemic logics I mean basic assumptions and criteria regarding what is to be counted as scientific knowledge as well as the specific rules, procedures, and techniques through which such knowledge becomes intelligible.

The article distinguishes three overall epistemic logics at play throughout the century. First, empirical psychology took form in relation to the Aristotelian-scholastic understanding of experience as universal and evidently true statements about how things in nature generally behave. Against this background, empirical psychology was typically a matter of defining and demonstrating the general structure of the soul and its faculties by referring to what everyone could recognize as evidently and universally true. Second, from around the mid-18th century a new strand of philosophical-medical psychology emerged in which extraordinary medical cases became central. Some authors argued that such cases constituted experiments in their own right, while others made them the core of a highly eclectic empirical psychology oriented toward pathological abnormalities, individual differences and the unique subjective experience. Third, from the early 1770s, a third epistemic logic came into play through the emergence of an extensive discourse on psychological method and particularly on the method of self-observation. At the core of this discourse were the epistemic techniques developed within experimental philosophy, where evidence and truth were the result of frequently repeated and rigorously documented singular observations.

While previous studies of 18th-century psychology have often focused on the overall discipline as well as on its various parts, theories and methods, the analysis of epistemic logics charts the very intelligibility of the knowledge produced in the interplay between psychological demonstrations, extraordinary cases, experiments and self-observations. By thus offering a new perspective on the many disparate and sometimes contradictory attempts to acquire empirical knowledge of the soul, the article complements both the disciplinary history of psychology and the analysis of cultural and intellectual contexts.

2 | EVIDENTLY TRUE EXPERIENCE OF THE SOUL

The philosopher Christian Wolff is widely recognized as having established the distinction between empirical and rational psychology (Araujo et al., 2021, p. 2; Klempe, 2020, p. 163; Lapointe, 1973; Vidal, 2011, pp. 89–97). Although Wolff distinguished conceptually between the two as early as the *German Metaphysics (Vernünfftige Gedancken von Gott, der Welt und der Seele des Menschen, 1720)*, the terms “empirical psychology” and “rational psychology” first appeared in the *Latin Logic (Philosophia rationalis sive logica, 1728)*, to then form the basis of the voluminous *Empirical Psychology (Psychologia empirica, 1732)* and *Rational Psychology (Psychologia rationalis, 1734)*. Whereas the former “establishes principles through experience,” the latter examines “whatever is possible through the human soul” (Wolff, 1968, p. 1, §. 1, Wolff, 1994, p. 1, §. 1, Wolff, 1980b, pp. 230, 234).¹ It has sometimes been suggested that Wolff’s empirical psychology used a dedicated introspective method (Leventhal, 2019, pp. 115–116; Vidal, 2011, pp. 92–93). This is only partly true; Wolff’s internal or introspective method was in fact not specific to psychology but rather was common to all empirical sciences. To explain how this can be the case we need to look closer at both the Wolffian method and the epistemic role of experience more broadly.

The Wolffian philosophy featured an all-embracing system of knowledge in which psychology or the science of the soul constituted a part of metaphysics (together with ontology, cosmology and natural theology) (Arndt, 1978; École, 1990; Frängsmyr, 1999; Gómez Tutor, 2004, 2018; Schneiders, 1983; Wundt, 1964). Uniting the system as a whole was the universal demonstrative or mathematical method, whereby every truth could be demonstrated from other more fundamental truths till only axioms, definitions and empirical propositions remained (Gómez Tutor, 2018, 2004). The function of the empirical proposition was to state matters of experiential fact. In the highly popular *German Logic (Vernünfftige Gedancken von den Kräften des menschlichen Verstandes, 1713)* Wolff thus pedagogically defined experience (*Erfahrung*) as “everything that we recognize when we pay attention to our perceptions. For instance, I see that when a light is lit everything around me becomes visible; that the spilled water makes the table wet; that the flame of the light ignites the paper and so on. All such knowledge is called experience” (Wolff, 1978, p. 181, §. 1).² In the *Latin Logic* Wolff also called this basic form “historical knowledge” (*cognitio historica*). “For example, historical knowledge is possessed by him who knows from experience that the sun rises in the morning and sets in the evening, that at the beginning of spring the buds of trees blossom forth, that animals are propagated by generation, that we desire nothing except under the aspect of good” (Wolff, 1963, p. 3, Wolff, 1983a, p. 2, §. 3).³ Wolff’s conception of experience was not his own invention but reflected what can be referred to as the Aristotelian-scholastic notion of experience (Pomata, 2005; Pomata & Siraisi, 2005).⁴ Aristotle thus remarked that experience is the result of many perceptions accumulated and stored in memory (Aristotle, 1995; 2.19). In line with this logic, to use experience in science was, as the historian of science Peter Dear has remarked, typically a matter of forming universal and often evidently true statements either directly from memory or by reference to weighty authorities, rather than making actual observations (Dear, 1995, p. 22). To request observational proof of statements such as “heavy bodies fall” would have been pointless, simply for the reason that everyone already accepted them as true. In the case of Wolff, who adopted the demonstrative method largely from the scholastic tradition, this epistemic logic ran throughout his philosophy (Arndt, 1978; Frängsmyr, 1999; Wundt, 1964). In the *German Logic*, for instance, Wolff pointed out that

When someone concludes from experience that the spilled water makes the table wet, it would be pointless if he referred to a specific case. Because it is a thing that occurs daily, there should be no one who has not had this experience several times. And if there would be someone who has never yet seen such an event he could easily pour water on the table and see that it becomes wet (Wolff, 1978, p. 182, §. 3).⁵

In line with the Aristotelian-scholastic logic of experience, in such cases it would have been pointless to request or refer to specific singular observations. Although scholars have shown that the Wolffian production of empirical

propositions required a methodologically rigorous internal operation, it was precisely by being evidently true and thus indubitable that these propositions were useful in scientific demonstrations (Gómez Tutor, 2018, 2004).

Having highlighted this basic epistemic logic, we are now in a position to return to psychology. Here as in other disciplines, the role of experience was to provide evidently true and indubitable propositions. These were then to serve as a basis for more complex scientific demonstrations. That this was how Wolff himself perceived the issue becomes strikingly clear in the introductory paragraph to the discussion of empirical psychology in the *German Metaphysics*.

I am not attempting here to show what the soul is and how changes take place in it, but my plan now is simply to tell what we perceive of it through our daily experience. And I don't want to state here anything beyond what anyone who pays attention to himself realizes. This will provide us with the basis from which other things can be deduced, which not everyone immediately realizes. Namely, from what we perceive of the soul we want to form clear concepts and now and again notice some important truths that can be demonstrated from these (Wolff, 1983c, pp. 106–107, §. 191).⁶

For Wolff and the Wolffians, there was no epistemological problem regarding how to acquire empirical knowledge of the soul through observations simply because the production of such knowledge did not typically require actual observational practices. Instead, empirical knowledge was produced through an internal operation whereby perceptions stored in memory were refined into universal and evidently true empirical propositions. Since all empirical disciplines relied largely on this internal and, in a way, introspective operation, there was no need to develop a *specific* introspective method within empirical psychology.

To summarize, three principal points are particularly worth stressing. First, Wolff's empirical psychology reflected the Aristotelian-scholastic conception of experience. The fact that empirical propositions were typically produced by consulting memory explains why the soul was regarded as just one among many similar objects of knowledge. Second, in approaching the soul as an object that could be explored empirically as well as through demonstrations, Wolff was not original, but rather working within an established tradition and genre. Third, for those working in this tradition it would have made no sense to define psychology as a scientific discipline in the modern sense of the word. Not only did psychology lack its own methods, but its very justification as an area of study relied on its embeddedness in and intimate connection to other parts of philosophy. For this reason, any attempt to inscribe Wolff's empirical psychology in a larger disciplinary history of the birth of modern psychology runs the risk of seriously obscuring its very meaning and function.

3 | TOWARDS A PSYCHOLOGY OF EXTRAORDINARY CASES

As the Wolffian philosophy expanded, numerous Wolffian textbooks were published (Wundt, 1964, pp. 211–230). The majority were orthodox, serving mainly to reproduce and spread Wolffian ideas. These had little impact over time; the future instead belonged to a new generation of eclectic works that typically combined the Wolffian method with other strands of thought. To understand the way in which these affected the development of empirical psychology it is necessary to take a step back and examine an alternative epistemic logic at play in Wolff's philosophy.

So far, I have drawn attention to the epistemic logic of the demonstrative method. There was, however, also a second type of reasoning that operated within Wolff's system, concerned with a kind of experience that was not evidently true.

when someone says, he knows from experience that the air is heavy, then it is not obvious for everyone what perception he has had when he recognizes the heaviness of air. It is therefore

necessary that he refer to a specific case in which he recognized the heaviness of air, as for instance, that he carefully emptied the air out of a very big glass container or a copper globe, with help of an air pump, whereupon he hung it on the very long arm of a scale, after which it indicated a big difference in weight. Although this signifies the actual experience, the proposition “the air is heavy” can be concluded from it (Wolff, 1978, pp. 181–182, §. 3).⁷

Underlying this particular example was the further distinction between common and hidden historical knowledge. Whereas common facts require “only attention and, of course, some acumen ... hidden facts must be brought to light by skilled investigators, and even then they are not known unless reason gives its assistance to the senses. As a result we distinguish between common and secret historical knowledge” (Wolff, 1963, p. 12; Wolff, 1983a, p. 10, §. 21).⁸ This distinction corresponded with that between observations and experiments. “Observation is experience, that is centred around the facts of nature, obtained without our intervention. Experiment is experience, that is centred around the facts of nature, which cannot be obtained without our intervention” (Wolff, 1968, p. 357, §. 456).⁹ Although the terms had varied in meaning since the Middle Ages, in Wolff’s time the above sense was firmly established and commonly accepted in the scientific community (Daston, 2011, p. 86; Park, 2011; Pomata, 2011). Wolff, who had taught on and written about experimental philosophy since 1709, was of course familiar with it (École, 1979; Mühlfordt, 1992; Vanzo, 2015; Wolff, 1980a, p. 146). What I wish to bring to light here, however, is the epistemic logic of the experimental experience. Since hidden historical facts were not evidently true, it was necessary to find another way of rendering them credible or even indubitable. In the seminal study *Leviathan and the Air-Pump* Steven Shapin and Simon Schaffer show how this problem was solved by using a combination of material, literary and social technologies for observing, documenting, and communicating new facts to the larger community (Shapin & Schaffer, 1985, pp. 25–79). To the more specific epistemic techniques was added the replication of experiments, each of which should be rigorously documented and attended by reliable witnesses (Shapin & Schaffer, 1985, p. 60). Experiments thus conducted could reveal new, hitherto concealed truths of nature. As Dear aptly writes, it “could not be *evident*, but it could provide *evidence*” (Dear, 1995, p. 25). Wolff, who frequently referred both to Robert Boyle’s emblematic experiments with the air pump and to the work of Robert Hooke, was of course well acquainted with the epistemic techniques of the experiment.¹⁰ In the *German Logic* he thus recommended

that everyone who wants to be wise from experience should carefully write down all his experiences that do not occur daily, and diligently examine them according to all their circumstances. Particularly if we have brought things together in nature to our liking which otherwise would not come together, that is, if we experiment, we can assure ourselves all the more that we have most carefully accounted for all the conditions under which something happens when we repeat our experiment at another time, or if we have others repeat it (Wolff, 1978, pp. 187–188, §. 12).¹¹

Diligent examination, documentation, and replication were thus crucial in cases where experiments were used to reveal the hidden phenomena of nature. Rather than being epistemically opposed to the evidently true experience, however, the experiment merely provided a different technology for establishing universal truths of nature. But how did the experimental logic apply to psychology? How could the soul be subjected to experimentation? When it comes to these questions we are left with a number of rather ambiguous remarks in which Wolff, for instance, proclaimed “that empirical psychology is similar to experimental physics. For it is also the case that experimental physics supplies principles for dogmatic physics” (Wolff, 1968, p. 3, §. 4, Wolff, 1980b, pp. 231–232)¹² and that “there is room for it [the experiment] in all forms of philosophy, even in natural theology” (Wolff, 1968, p. 358, §. 459).¹³ In spite of these bold proclamations, however, Wolff did not indicate whether he had in mind specifically psychological experiments or whether he meant rather that all sciences could benefit from, and use in demonstrations, the truths of experimental philosophy. If he had the former in mind, then the absence of

examples of specific psychological experiments may indicate that he was simply unable to figure out what such experiments might look like or be feasible in practice. If he instead meant that there are no specific psychological experiments, however, then there are also no specific problems beyond those that apply to experimentation more generally.

Wolff's notoriously ambiguous remarks did not stop his followers from delving into the matter. The key issue was how to fulfil the criterion of intervention in the course of nature; that is, the very distinguishing feature of an experiment. Various authors came up with a number of disparate approaches. One rare but fascinating example is the Wolffian philosopher Gottlieb Friedrich Hagen, who suggested that behavioral intervention would do and that, for instance, people's abilities to memorize narrated facts would serve as a measure of attention (Ramul, 1960; Rydberg, 2021). A more common strategy was to propose surgical interventions and the measurement of nerve liquids (Nowitzki, 2003; Rydberg, 2021; Zelle, 2001a). A third possibility was that self-examinations provided a form of introspective experiment on the soul (Rydberg, 2021). What these three radically different solutions illustrate is that there was little consensus regarding the specific nature of experiments on the soul.

Within the context of this rather marginal discourse a new, and at first glance rather odd, epistemic logic came into play. Johann Gottlob Krüger studied philosophy and medicine with Wolff and Friedrich Hoffmann before he himself became a doctor of medicine in 1742 (Nowitzki, 2003; Sturm, 2010). Inspired by the iatromechanical medicine of his time, he presented exactly the kind of body-soul theory that might seem to lend itself to surgical experiments on the mind (Heinz, 1996; Nowitzki, 2003; Rydberg, 2021; Zelle, 2001a). However, in the following decade he partly abandoned this project in favor of a new strand of psychology presented in the extensive *Attempt at an Experimental Psychology (Versuch einer Experimental-Seelenlehre, 1756)* (Heinz, 1996, p. 27; Nowitzki, 2003, p. 76). In the very first paragraph Krüger pinpointed the crux of the problem of psychological experiments.

One would maybe take it for a mere joke if I were to say that I have taken on the task of showing how one can know the soul through experiments. Experiment, one would say, can only be conducted on bodies. Would one really bring the soul under the air-pump, observing its gestalt through the magnifying glass, measuring its powers? This thought is so obvious that I think it would occur to most people who would face these pages (Krüger, 1756b, p. 1, §. 1).¹⁴

Having addressed the core problem of intervention, Krüger dismissed surgical interventions on living humans on ethical grounds. He then touched on the limited value of experiments on animals before arriving at a somewhat unexpected solution.

Thus, except that one can conduct many experiments on animals, the observations of medical science, made in all times, provide circumstances where the soul, through extraordinary changes of the body, is placed in such extraordinary and rare states that they quite reasonably can be regarded as experiments conducted on the soul (Krüger, 1756b, p. 20, §. 7).¹⁵

Krüger's attempt to satisfy the criterion of intervention by appealing to documentation of extraordinary medical cases has caught the interest of several scholars. While Hans-Peter Nowitzki has noticed that Krüger did indeed rely on a large and diverse body of cases, Carsten Zelle has argued that "Krüger abandons 'experiment' in favour of 'observation' and thus upgrades descriptions of medical cases" (Zelle, 2001a, pp. 100–101). More recently, scholars have suggested that Krüger's turn to medical cases should be understood in relation to what the historian Gianna Pomata has referred to as an epistemic genre (Leventhal, 2019; Retzlaff, 2018). According to Pomata, in the early modern age collections (*historia morbi/observationes/curaciones*) of medical cases (*casus/exempla*) constituted an established epistemic genre in the sense of "a framework for gathering, describing and organizing the raw materials of experience" (Pomata, 2010, p. 197). In this sense, they served as a systematic extension of the physician's own memory, helping him to identify diseases, causes, and cures. While it is now fairly

accepted that Krüger relied heavily on this genre, I would like to add that it provided the very epistemic rationale for his claim that extraordinary cases can also be regarded as a form of experiment. Since nature had already intervened it was not necessary to make actual interventions. Collections of documented cases could hereby take the place of spatially and temporally specific experimental situations. The only thing one needed to do was thus to interpret and draw conclusions from nature's own experiments.

Krüger's suggestion was indeed innovative. Yet perhaps the most important part was not the turn to cases as such, but rather his compilation of a vast collection of medical cases, varying in length from a few sentences to several pages, covering everything from the mental effects of various physical injuries or of passionate feelings of love, hatred, and fear, to cases of people with delusions, hypochondria, and imaginary illnesses. One case thus describes a girl who recovered from a head injury after parts of her brain had been removed; another a young woman who fell into convulsions and died after having been frightened during a walk; another a young man convinced that he had a living frog in his stomach; another a mad barbarian prince who bit off and ate his own limbs; and another a young man who lost both sense and taste, and so on and so forth (Krüger, 1756a, pp. 33–34, 52–56, 73–74). Although cases such as these had figured within medicine for a long time, Krüger now adopted, adapted, and applied them within psychology.¹⁶ Two things are especially remarkable. First, to approach the science of the soul in terms of specific empirical material was foreign to the Wolffian psychology as to most other early modern psychologies. To my knowledge, there are no previous such examples. Second, in channeling specific cases into psychology Krüger initiated an epistemic shift: whereas psychology before had revolved around the general and universal structure of the human mind, the focal point now shifted toward the individual, unique and often abnormal.

4 | EXTRAORDINARY CASES AND PSYCHOLOGICAL CASE HISTORIES

Although the path from Krüger to a more expansive empirical psychology is not clear-cut, in retrospect there can hardly be any doubt that a case-based psychology belonged to the future. In *Concise Conception of all Science (Kurzer Begriff aller Wissenschaften, 1759)* the mathematician and philosopher Johann Georg Sulzer thus stressed that “it would also be very useful if some extraordinary psychological cases, which cannot yet be explained through the known properties of the soul, were studied in detail in specific contributions” (Sulzer, 1759, p. 159, §. 207).¹⁷ Yet, despite Sulzer's optimistic remark, the actual breakthrough would not come until the early 1780s. In 1782 the philosopher and writer Karl Philipp Moritz published a text titled *Prospect of an Experimental Psychology (Aussichten zu einer Experimentalseelenlehre)*, in which he advocated for the necessity of a journal of experimental psychology. In a manner strongly reminiscent of Krüger's approach he argued that “from the combined reports of several scrupulous observers of the human heart could an experimental psychology emerge, which practical utility would exceed everything that our ancestors have achieved in this field” (Moritz, 1782a, p. 6).¹⁸ In the same year as *Prospect* was published it was also reprinted under the title *Proposal for a Journal in Empirical Psychology (Vorschlag zu einem Magazin einer Erfahrungs-Seelenkunde)*, with a revised introduction in which Moritz remarked that “Mr Moses Mendelssohn has himself shared with me his thoughts about the plan of this study, and he gave me the advice to change the name experimental psychology, which I had chosen from the beginning, into empirical psychology” (Moritz, 1782b, p. 503).¹⁹ The following year the journal appeared as *Know Thyself or Journal of Empirical Psychology (ΓΝΩΘΙ ΣΑΥΤΟΝ oder Magazin zur Erfahrungsseelenkunde, 1783–1793)*. The anecdotal detail of how Moritz changed the title is, as Zelle has remarked, indicative of the larger process through which experimental psychology was abandoned for empirical psychology (Zelle, 2001a). A few years later this development was further cemented through Immanuel Kant's famous critique of psychology in *Metaphysical Foundations of Natural Science (Metaphysische Anfangsgründe der Naturwissenschaft, 1786)* (Hatfield, 2006; Kraus, 2020; Sturm, 2006, 2009). According to Kant, empirical psychology can “never approach chemistry even as a systematic art of analysis or experimental doctrine, for in it the manifold of inner observation can be separated only by mere division in thought,

and cannot then be held separate and recombined at will" (Kant, 2002; 4:471). As a result, it can "never become anything more than an historical doctrine of nature, and, as such, a natural doctrine of inner sense which is as systematic as possible, that is, a natural description of the soul, but never a science of the soul, nor even, indeed, an experimental psychological doctrine" (Kant, 2002; 4:471). Although Kant's verdict dealt a heavy blow to any claim to an *experimental* psychology, it did not, as we will see, put an end to the attempt to launch *empirical* psychology as a form of science.

Moritz's journal *Know Thyself or Journal of Empirical Psychology* featured a large collection of cases, divided into the two major categories of "pathology" (Seelenkrankheitskunde) and "physiology" (Seelennaturkunde).²⁰ Whereas the former focused on the kind of extraordinary cases that we have already seen in Krüger, the latter was more complex, as it incorporated a broad range of sources, including biographical and autobiographical accounts, letters, diaries and detailed observations and self-observations. The inclusion of these sources represented a clear expansion of the epistemic genre of medical case collections. Most importantly, by accounting for people's lives, including everything from their earliest childhood memories to particularly traumatic events or mundane thoughts and feelings, psychology became a matter of exploring the human soul, not as a rigid and universal structure, but as a vast and open-ended field of human experience. This interest in the human being as a complex whole, where body and soul are intimately connected and constantly in interaction, reflected what scholars have referred to as the anthropological turn (Borchers, 2011; Geyer-Kordesch, 2000; Heinz, 1996; Košenina, 2009; Leventhal, 2019; Nowitzki, 2003; Sträter & Lehmann, 2009; Zelle, 2001b). Starting around midcentury, the anthropological turn featured a broad interdisciplinary and highly eclectic exploration of the medical, physiological, psychological and moral aspects of human existence. In the second half of the century, the anthropological turn fed into and fused with the culture of sensibility as well as the broader interest in subjectivity and selfhood of which it was part.²¹ That the expansive usage of cases that Moritz's journal exemplifies reflects a broad social, cultural and intellectual interest in the unique individual experience is today fairly accepted among scholars (Fossaluzza, 2006; Košenina, 2009; Leventhal, 2019). Most notably, Leventhal has remarked that it is in this broader context that the narrative psychological case history emerged as a unique attempt "to articulate the individual in its very individuality—a unique self, conceived in its irreducible singularity" (Leventhal, 2019, p. 1).

The expansion of the category of cases to include letters, autobiographical reflections, observations of other people, and self-observations was a clever way of appealing to a broad spectrum of readers and contributors. One who was "passionately captivated" by the journal was the theologian and writer Immanuel David Mauchart, who published *Appendix to the First Six Volumes of the Journal of Empirical Psychology (Anhang zu den sechs ersten Bänden des Magazins zur Erfahrungsseelenkunde, 1789)* as well as the more extensive *Phenomena of the Human Soul. A Collection of Materials for Future Enlightenment in Empirical Psychology (Phänomene der menschlichen Seele. Eine Materialien-Sammlung zur künftigen Aufklärung in der Erfahrungs-Seelenlehre, 1789)* (Mauchart, 1789a; preface).²² In the *Appendix* Mauchart remarked that if only enough material could be collected and analyzed the reader would understand "that the result follows as necessary from the connected observations as 5 from $2 \times 2 + 1$ " (Mauchart, 1789a; preface).²³ Similarly, in *Phenomena of the Human Soul* he emphasized that his intention was not to challenge Moritz's journal or even to produce scientific truths but rather to collect and offer material for others to analyze (Mauchart, 1789b; preface). That Mauchart explicitly described his endeavor in this way is indicative of the new case-based psychology in which the mere collection of material was seen as a fully sufficient contribution.

From an epistemic point of view the promotion of a new empirical psychology based on various forms of more or less extraordinary cases marked an important shift from the kind of baroque psychology that Wolff represented to a more "phenomenological" psychology in which the level of individual experience was layered onto the traditional discourses of the different faculties. Whereas for Wolff, who was interested in the universal and general, it would have made little sense to dwell on individual cases or to compose extensive case collections, Moritz saw such material as pivotal to the exploration of the inexhaustible field of individual and subjective human experience. Rather than just adopting the classical medical case or even the extraordinary case of Krüger, however, Moritz's journal featured the active production of a broad spectrum of eclectic, partly medical and partly literary cases, some

of which extended into book-length psychological case histories. Clearly the most striking example is Moritz's own four-volume autobiographical novel *Anton Reiser: A Psychological Novel* (*Anton Reiser. Ein Psychologischer Roman*, 1785–90). The work accounted for Reiser's life from early childhood to adulthood (Fossaluzza, 2006; Košenina, 2009). Deeply influenced by the culture of sensibility, Reiser's life unfolded as a struggle between periods of exaggerated feeling and attempts to control its forces through reason and the intellect. Although Reiser sought to discipline himself through diary writing, it was only after much training that he was eventually able to observe his own behavior.

At that time, Reiser did not yet know how to observe the influence of external—real events on the inner state of his mind; his attention to himself had not yet received the proper direction. However, his diary improved over time, in that he began to record not only the events, but also his intentions and resolutions, to eventually see what he would have achieved.—He thus made laws for himself, which he wrote down in his diary to bring them to fruition.—He also occasionally made solemn vows to himself, e.g., to get up early, to divide the hours of the day, and the like (Moritz, 1786, p. 15).²⁴

Seen in relation to the journal, the novel might be said to provide one lengthy and exemplary psychological case study. That the two were intimately interwoven is also suggested by the fact that extracts of the novel were published as particularly revealing cases in the journal. In volume 2, a fragment thus appeared, recounting how Reiser had developed a preference for sensibility as a child.

Thus his imagination was responsible for most of his childhood sorrows and joys. How often, when on a dull day he was locked up fastidious and disgusted in the room, and a ray of sunshine fell through a windowpane, suddenly he was awakened by ideas of Paradise, of Elysium, or of the island of Calypso, which made him feel delighted for hours (Moritz, 1784, part. I, p. 78).²⁵

Anton Reiser reappeared every now and then, and in volume 8 a long excerpt was published, again containing detailed observations regarding Reiser's fluctuating inner life.

The annoyance which then took the place of the tickled hope was of such a coarse, mean, and repugnant kind that not even the slightest degree of mild melancholy or anything like that could exist with it. It was almost like the feeling of a person who is soaked through by the rain, and when he returns home shivering from the frost, he also finds a cold room (Moritz, 1791, part. II, p. 24).²⁶

These passages exemplify how observations and self-observations often unfolded as detailed narratives of intense sensibility. The lack of clear distinctions between brief cases and volume-length literary accounts was not unique to Moritz. A particularly revealing example here is the Swiss poet, philosopher and theologian Johann Caspar Lavater. Lavater is most famous for his physiognomy, in which he sought to extract information regarding people's inner lives by studying their external appearance, gestures and general behavior. Before launching physiognomy, however, Lavater published *A Secret Diary of a Self-Observer* (*Geheimes Tagebuch von einem Beobachter seiner Selbst*, 1771), followed by the sequel *Unchanged Fragments of the Secret Diary of a Self-Observer* (*Unveränderte Fragmente aus dem Tagebuche eines Beobachters seiner Selbst*, 1773). In the preface to the first volume Lavater stressed that the aim was to contribute to the history of the human heart by providing a detailed account of his daily struggle to structure life around Christian principles and spiritual exercises. Having set up a list of 12 rules of Christian virtue (start and end every day with prayer, read the Bible, etc.), the work then proceeded by documenting successes as well as failures (Lavater, 1771). Two years later the *Unchanged Fragments* appeared, and in the preface Lavater admitted that the first volume had been edited and that now, at readers' request, he wanted to display the source

text unaltered. Although it is questionable whether the second volume actually consisted of such unaltered fragments, some observations display a clear focus on the inner life.

When I woke up, I considered and examined the previous day. I scrutinized all situations in my imagination. How often did I have reason to blush! How completely different we see and judge ourselves if we only look at ourselves with the eyes of an impartial witness. With this in mind, I wished to have more time and skill in drawing to be able to fix by means of drawings many situations in my life that can hardly be described in words... What if I saw someone else doing what I am doing now? Someone who thinks the way I think I am now, looking into the soul? If I saved this situation with a drawing how would I then appear in those quiet hours when passion is silent? (Lavater, 1773, pp. 197–198).²⁷

Again we see how Lavater's discourse expresses an interest in the individual and subjective experience of inner life, similar to the observations presented in Moritz's journal. Compare, for example, this anonymous contribution containing strangely fragmentary glimpses of various states of mind:

Observations about my character: Few subtle sensations—little emotion—intense and extensively weak imagination—heavy thinking; laborious writing—abstract and subtle thinking, at times subtlety—unbelief and doubtfulness—coldness, slow examination, fear of hastiness and enthusiasm; almost anger at him with whom I cannot sympathize.—Respect for what is good, as far as it is right and sublime.—The habit of noticing the inadequate, the limits of good and bad.—Moderation in love and disgust, equity, judgment free from affect—habit of quickly noticing dissimilarities, acumen.—Sins of omission from lack of zeal (Moritz, 1788; part. II, pp. 56–57).²⁸

Although an extreme example, it nevertheless illuminates the pivotal role of self-observations in empirical psychology. Far from the Wolffian attempt to demonstrate what generally and universally pertains to the soul, we here face a kind of fragmentary jotting that attempts to capture and summarize the daily stream of thoughts and emotions. More than rational demonstrations, they bring to mind a physician who meticulously observes every instance of change in the diseased body or the experimental philosopher who accounts for every minor occurrence during an experiment.

To summarize, in the second half of the eighteenth century and especially from the 1780s onward the use of medical cases within empirical psychology expanded to include not only extraordinary cases extracted from existing literature but also the active production of a broad spectrum of cases stretching from biographical and autobiographical accounts to diaries, letters and specific observations and self-observations. While the cases presented in Moritz's journal were typically not longer than a few pages, there was no limit to how extensive they could be—as illustrated both by Moritz's psychological novel *Anton Reiser* and by Lavater's *A Secret Diary of a Self-Observer*. What for Wolff had been a matter of defining and drawing conclusions from common knowledge of the soul, now seemed to take the form of an open-ended exploration of human subjective experience as such. For Moritz and Lavater there was no outer limit to the individual web of thoughts, imaginations and emotions. Although they would have agreed with both the Wolffians and the physicians who sought patterns, structures and principles, this new empirical psychology was first of all a matter of collecting and exploring vast amounts of data.

5 | DEVELOPING A SYSTEMATIC METHOD FOR OBSERVATIONS AND SELF-OBSERVATIONS

So far, we have seen how empirical psychology underwent a thoroughgoing epistemic transformation from the mid-eighteenth century onward. Where it had before relied on evidently true experience of how the mind generally works, it later adopted extraordinary cases from medicine as the backbone of a psychology oriented toward

individual differences and, particularly, abnormality. From around the 1780s the use of cases expanded to include a variety of materials, from fragmentary observations and self-observations to volume-length psychological case histories. It is significant that cases were no longer simply extracted from established literature but also actively produced. The production of cases went hand in hand with a rapidly expanding methodological discourse on observations and particularly self-observations. The research on this material is surprisingly sparse. While some texts have been discussed, for instance, by Fernando Vidal, Thomas Sturm and Gary Hatfield, the focus is typically on the different subdisciplines and methods of psychology (empirical, rational and transcendental psychology) rather than on epistemic logics (Hatfield, 2006; Sturm, 2009; Vidal, 2011).

A good starting point for studying the epistemic logic of self-observation is the writer and philosopher Christian Gottfried Schütz's critical comments on Charles Bonnet's *Analytical Essay on the Faculties of the Soul* (*Essai analytique sur les facultés de l'âme*, 1760). The comments, which were titled *Reflections on the Various Methods of Psychology* (*Betrachtungen über die verschiedenen Methoden der Psychologie*, 1771), provided what scholars have emphasized as a pioneering discourse on the challenges and possibilities of self-observations (Sturm, 2006, 2009; Vidal, 2011). Most importantly, Schütz addressed a predicament that would haunt empirical psychology for the rest of the century. "The spectacle presented by the human soul is so varied, so composed; and who is now the spectator of it? She herself is both an actor and a spectator; a circumstance which causes the greatest difficulty in psychology" (Schütz, 1771, p. 192).²⁹ Not only is the soul simultaneously an observing subject and observed object, but in both these roles it "resembles a fast-flowing stream that always seems to stay the same, and yet is always changing" (Schütz, 1771, p. 203).³⁰ Given these conditions, the epistemic techniques developed within experimental philosophy might appear difficult or even impossible to apply to the soul. However, for Schütz this very predicament rather seemed to call for their extraordinarily rigorous application. Here he stressed three methodological principles. First, "one must collect a great number of individual observations before one can deduce a certain result from them, and never forget that the incidents which one observes are individual cases, from which the general can be inferred only with great care and caution" (Schütz, 1771, p. 264).³¹ Second, "one must rather notice the phenomena of the soul with all their ancillary features than tearing them out of context, where they often get a completely different appearance. Without observing this rule, it is often impossible to get out of apparent contradictions" (Schütz, 1771, p. 265).³² And third, "one must not ignore trifles and accidental manifestations, no matter how minor they may appear" (Schütz, 1771, p. 265).³³

Schütz's discourse evinces a significant epistemic transformation. First, in sharp contrast to the Wolffian and most other strands of early modern psychology, the aim was no longer to establish general truths about the soul by adducing evidently true empirical propositions. Instead, Schütz resorted to the epistemic logic and techniques of experimental philosophy, in which singular observations were accumulated and systematically analyzed. Second, Schütz's discourse also differed from that of the extraordinary medical case. Although cases ultimately relied on actual observations, in their collected form they typically became spatially and temporally detached from their originating circumstances. Schütz's method, in contrast, instead took the form of a detailed instruction in the actual practice of self-observation.

Schütz's attempt to apply the epistemic techniques of the experimental experience to self-observation was an early example of a discourse that proliferated in the last decades of the century. A second example can be found in the work of the philosopher Johannes Nikolaus Tetens, who came up with similar suggestions in the preface to *Philosophical Inquiries into Human Nature and Its Development* (*Philosophische Versuche über die menschliche Natur und ihre Entwicklung*, 1777).

Notice the modifications of the soul as they appear through self-reflection; repeat, observe and perceive these under different circumstances, notice the way they emerge and the laws of operation of the forces that they produce; then compare and resolve the observations, and from these try to discover the most elementary abilities and effects as well as their relations to one another. These are

the most essential performances in the psychological analysis of the soul, which is based on experience. This method is the method of natural philosophy (Tetens, 1777; preface, p. 4).³⁴

Like Schütz, Tetens spotlighted a number of difficulties connected to the constantly fluctuating nature of the mind. To compensate for this predicament, which pertained to the mind as observer and as object of observation, Tetens advocated the accumulation of numerous observations. "I know no means effective enough to guard against these [the delusions of the inner senses], other than the repetition of the same observation, both under similar and different circumstances, each time made with the firm determination to distinguish and strongly acknowledge what is real perception from what is added fantasy" (Tetens, 1777; preface, p. 17).³⁵ In addition to discussing the method of self-observation, Tetens also stressed the importance of extracting principles out of these. "One of the most noble operations in the observational method consists in turning the particular empirical propositions drawn from individual cases into general propositions" (Tetens, 1777; preface, p. 19),³⁶ by means of analogy. "In the end," Tetens remarked, "it is the reflections and conclusions that make the simple observations really useful, and without which we would have to remain constantly only on the outer surface of things" (Tetens, 1777; preface, p. 30).³⁷

In the following decades the discourse on methods within empirical psychology was further elaborated by several intellectuals. One case in point is Johann Werner Streithorst, who despite his profession as a theologian entertained a special interest in psychology. In *Psychological Lectures (Psychologische Vorlesungen, 1787)* he provided a detailed discussion of self-observation. In line with his predecessors, Streithorst stressed the necessity of rigorously conducted self-observations.

Only attentive, conscious, sustained and repeated perception, encompassing the object from all sides, deserves the name observation, and only the one deserves the name observer who already has the skill and the predominating tendency to perceive in the way described. Attention and adhesion to the object of observation, lengthy consideration of the same and frequent repetition of this operation of the soul thus constitutes the essence of self-observation (Streithorst, 1787, p. 8).³⁸

If the observer of nature might easily be misled by the external senses, the challenge of the self-observer is even greater because the mind is a constantly changing subject and object. For this reason, it was particularly important to conduct numerous observations. "Moreover, one must only repeat the same observation once with the same accuracy to convince oneself that one does not exhaust an object at once. Even after repeating the same observation for a thousandth time, there is still something left to discover" (Streithorst, 1787, p. 17).³⁹ The self-observer must proceed in the same manner as the natural philosopher who observes the sky through the telescope or a drop of water through the magnifying glass and then systematizes the observations. "He compares present appearances of his soul with former ones, distinguishes the rare from the ordinary, and like the natural philosopher he has his own cabinet of curiosity where he particularly notices the rarities and brings everything into its class and order" (Streithorst, 1787, p. 14).⁴⁰

Around 1790 empirical psychology had risen to become a new fashion of the day. One of those who sailed with the wind was the philosopher and writer Ludwig Heinrich Jakob, who published the *Outline of Empirical Psychology* in 1791 (*Grundriß der Erfahrungs-Seelenlehre*). The *Outline*, which was published in four editions (1791, 1795, 1800, and 1810), contained a substantial discussion of method. On the one hand, Jakob drew on Kant when comparing empirical psychology to physics and chemistry. "Hence the method in psychology is the same as in physics and chemistry. Everything must be explained from other phenomena; and metaphysical assertions and transcendental hypotheses are the true *qualitates occultae*" (Jakob, 1791, p. 2, §. 3).⁴¹ On the other hand, he clearly drew different conclusions as regards the possibility of experiments on the soul. "First one collects a variety of individual effects through observation and experiments, and by comparing them one seeks the known general laws of experience, to discover the general rules, which serve to explain past and future phenomena" (Jakob, 1791, pp. 2-3, §. 3).⁴² Jakob here boldly claims that empirical psychology does indeed proceed in the same way as physics. While this is a rare

exception to the tendency to dismiss the use of experiments in psychology, one must not forget that the use of epistemic techniques adopted from experimental philosophy was well established in the early 1790s. The difficulties that Jakob highlighted were basically those that had been recognized for about two decades. Hence, Jakob argued that mental phenomena are problematic objects of study because of (1) their changeability and low durability, (2) the difficulty of conducting and repeating experiments, (3) the difficulty of staying focused during self-observations, (4) the great number of variable phenomena, of which some are important and others not, (5) the lack of available critically collected and examined data, and (6) the unreliability of other people's observations (Jakob, 1791, pp. 3–4, §. 4). These difficulties, Jakob continued, are certainly important explanations for the slow development of empirical psychology as a science.

Jakob belonged to the same circle as Carl Christian Erhard Schmid, who had established himself as one of the leading representatives for early Kantianism in the 1780s. In 1791 he published the voluminous *Introduction to Empirical Psychology* (*Einleitung zur Empirischen Psychologie*) (van Zantwijk, 2010). Schmid's psychology provided detailed instructions on what to observe, how to conduct observations and how to process the collected data (Schmid, 1791, p. 103, §. 15). He expanded on earlier methods to consider not only inner states and their changes but also physiognomy, behavior and even creative products such as art and literature. To become a skilled observer required "a talent of one's own, for lively and subtle sensation and distinct perception of the inner sense and for abstraction from the outside world" (Schmid, 1791, p. 108, §. 21).⁴³ Further requirements included "freedom from preconceived notions of the human soul," "exercise in observation in general," "acquaintance with the object of study," and "knowledge of the special circumstances which obstruct the business of spiritual observations" (Schmid, 1791, pp. 108–109, §. 21).⁴⁴ As for these "special circumstances" Schmid was aligned with his predecessors when stressing difficulties such as the "amount of things to be observed," "diversity of things," "continuity of things," "ceaseless flow and change," "confusion and obscurity," "imperceptible detail," "impossibility of a mathematical representation," and "impossibility of real examination and deliberate experiments" (Schmid, 1791, pp. 110–114, §. 22).⁴⁵ To these were added a number of other difficulties connected to the ways in which the act of observation impacts that which is being observed. To remedy these problems Schmid came up with a list of 12 rules. The observer should (1) "pay attention to details," (2) "not despise the every-day and common," (3) thoroughly analyze the effects of known faculties of the soul, (4) prioritize thorough observations over "superficial, carelessly collected, indefinite" ones, (5) neutralize the negative influence of "common and personal prejudices or the impact of inclinations and passions on the observation," (6) not let some expected result "come in the way of the continued observation, or destroy its impartiality," (7) be led but not controlled by analogies, (8) make broad explorations and investigations rather than narrow ones, (9) "record his observations in writing and keep them in a properly laid out and organized psychological journal," (10) not confuse facts with explanations of these, (11) communicate and discuss results, and (12) take into account psychological writings as well as biographies and observations (Schmid, 1791, pp. 120–126, §. 23).⁴⁶

To fulfil the purpose of establishing "psychology as science", collected data had to be processed and refined into scientific truths (Schmid, 1791, p. 126, §. 24).⁴⁷ First, it was important "to discover general empirical concepts and empirical rules that can be subsumed under the pure laws of nature" (Schmid, 1791, p. 126, §. 24).⁴⁸ Then one should "generalize these rules and concepts more and more, order and subordinate them in relation to each other, and ascend to the basic forces and the basic laws of the mind" (Schmid, 1791, pp. 126–127, §. 24).⁴⁹ By doing so one contributes to the unity of psychology as a systematic science. For those interested in further advice regarding the collection and processing of data, Schmid recommended the reading of none other than Schütz's *Reflections*, Moritz's *Prospect* and Streithorst's *Psychological Lectures* (Schmid, 1791, p. 128, §. 24). That Schmid referred to these works is typical and bears witness to the existence of a scientific community of psychologically oriented intellectuals.

A few years later Schmid would have the chance to apply some of his principles in his own *Psychological Journal* (*Psychologisches Magazin*, 1796–98). While remarking that it was important to fill the gap left when Moritz's journal had ceased publication, Schmid stressed that his journal sought not only to establish "raw material" but also "to

present examinations, to classify the present material under general concepts and to set up natural laws of the greatest possible generality, definiteness, systematic connection and evident certainty” (Schmid, 1796; preface).⁵⁰ In structuring the journal around general concepts and rules, rather than cases, Schmid was true to his own understanding of empirical psychology as a systematic science. In this respect the journal represents a step back to the kind of systematic psychology that was introduced already by Wolff.

To summarize, beginning in the early 1770s intellectuals developed an extensive discourse on empirical methods in psychology. In doing this they adopted the epistemic techniques for accumulating evidence by conducting and documenting numerous singular observations, on a model similar to experimental philosophy. The difficulties associated with the study of the soul were not seen as an argument against these techniques but rather seemed to call for their rigorous and systematic application. Hence, the observer of the soul must be even better prepared than the observer of nature. Although self-observations differed from medical cases in terms of epistemic techniques, once conducted they were typically presented in a similar format. That is, self-observations were refined into cases that, once gathered in large collections, were expected to reveal more general and complex truths. These distinct epistemic logics were thus not opposed, but provided different and typically complementary techniques for arriving at general and universal truths of the soul.

6 | CONCLUSION

This article draws on recent attempts to historicize basic epistemic categories such as truth, fact, experience, objectivity and the like. It uses the concept of epistemic logics to capture both the basic assumptions and criteria regarding what counts as scientific knowledge and the specific rules, procedures and practices through which such knowledge becomes intelligible. Previous studies of 18th-century psychology have focused on the overall discipline as well as on its various parts, theories and methods; the analysis of epistemic logics provides an important dimension to our understanding of the many disparate attempts to acquire empirical knowledge of the soul by charting the very basis of its intelligibility.

Three different yet compatible epistemic logics operated in this context. The first was that of the Aristotelian-scholastic experience, which was typically used to form universal and evidently true propositions of how things generally behave in nature. While trivial in themselves, universal empirical propositions could nevertheless be used to demonstrate more complex truths. When Wolff launched empirical psychology, it was this logic that fueled the attempt to establish the general nature, structure and functions of the soul. From midcentury, a new generation of physician-philosophers launched a brand of empirical psychology based on extraordinary medical cases. Whereas the Wolffian psychology charted the general and universal, the case-based psychology was oriented toward the vast and open-ended field of human experience. As a part of this broad focus, the margins of human experience, the deviant and abnormal, became of central concern. From the early 1770s this interest was complemented by a new methodological discourse, in which epistemic techniques rooted in experimental philosophy were adopted and applied to psychological observations and self-observations. Observers were to be disciplined and well trained in systematic observations and self-observations, as well as in how to document and process these into scientific knowledge.

The elaboration of psychological observations and self-observations is fascinating but also intriguing. Within experimental philosophy new epistemic techniques were developed as a result of new technologies that gave access to hitherto hidden phenomena of nature. It was necessary to observe and document exactly what happened in an experiment with the air-pump to establish facts that could otherwise easily be doubted. In empirical psychology there seem to have been no such new technologies. This, in turn, makes one wonder whether the new epistemic techniques served a merely rhetorical function in rendering empirical psychology scientifically credible. While there is probably some truth to the claim, this does not mean that there were no systematic self-observations. Quite the contrary, it seems to me that these techniques were adopted in a situation where detailed

self-observations already figured as a part of the culture of sensibility. If this interpretation is correct, it means that they served to systematize and articulate an existing practice that figured in a variety of contexts that were often cultural and literary rather than scientific. Such an interpretation is aligned with the view of empirical psychology as a deeply heterogeneous endeavor. Whereas the Wolffian psychology was almost exclusively a matter for philosophers, in the empirical psychology that took form in the wake of the anthropological turn, philosophers, physicians, theologians, poets and writers – most of whom knew and referred to each other—charted the human soul in different genres such as novels, autobiographies, diaries, journals, textbooks and extensive academic treatises. In this sense, the second half of the century witnessed the emergence of a highly eclectic scientific community.

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DATA AVAILABILITY STATEMENT

No data have been collected for this study.

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ENDNOTES

- ¹ “est scientia stabiliendi principia per experientiam” “est scientia eorum, quae per animam humanam possibilia sunt.”
- ² “Wir erfahren alles dasjenige, was wir erkennen, wenn wir auf unsere Empfindungen acht haben. Z. E. Ich sehe, daß, wenn ein Licht angezündet wird, alles um mich sichtbar wird; daß das ausgeschüttete Wasser den Tisch naß macht; daß die Flamme des Lichtes das Papier anzündet, und so weiter. Alle dergleichen Erkänntniß wird Erfahrung genennet.” All translations are my own except when published translations are cited. For similar definitions, see (Wolff, 1983c, pp. 181, §. 325, Wolff, 1983b, pp. 481, §. 664, Wolff, 1994, pp. 2, §. 2) For the reception of Wolff’s *German Logic*, see (Arndt, 1978).
- ³ “E. gr. Historica eius est cognitio, qui expertus novit, solem mane oriri, vespere autem occidere; initio veris gemmas effrondescere arborum; animalia propagari per generationem; nos nil appetere nisi sub ratione boni.”
- ⁴ Wolff was in line with the Aristotelian-scholastic tradition when distinguishing historical from philosophical knowledge of the grounds that whereas the former was merely factual, the latter concerned the causes of events. For the notion of history as basic factual knowledge, see (Pomata, 2005; Pomata & Siraisi, 2005).
- ⁵ “wenn einer as der Erfahrung annimmet: das ausgeschüttete Wasser mache den Tisch naß; so wäre unnötig, wenn er einen besonderen Fall hiervon anführen wolte. Denn weil es eine Sache ist, die sich täglich zuträget; so ist wohl niemand, der diese Erfahrung nicht vielmahl solte gehabt haben. Und wenn ja jemand seyn solte, der solches noch nicht gesehen; so kan er leicht Wasser auf den Tisch schütten, und sehen, wie der Tisch davon naß wird.”
- ⁶ “Ich verlange hier noch nicht zu zeigen was die Seele ist, und wie die Veränderungen sich in ihr ereignen, sondern mein Vorhaben ist jetzund bloß zu erzehlen, was wir durch die tägliche Erfahrung von ihr wahrnehmen. Und will ich hier weiter nichts anführen, als was ein jeder erkennen kan, der auf sich acht hat. Dieses wird uns zum Grunde dienen anderes daraus herzuweisen, das nicht ein jeder sogleich vor sich sehen kan. Nämlich wir wollen von demjenigen, was wir von der Seele wahrnehmen, deutliche Begriffes suchen, und hin und wieder einige wichtige Wahrheiten anmercken, die sich daraus erweisen lassen.”
- ⁷ “Wenn einer saget, er habe es aus der Erfahrung, daß die Luft schwer sey; so sind nicht gleich einem jeden die Empfindungen klar, die er gehabt, als er die Schwere der Luft erkandte. Derowegen ist nöthig, daß er einen besondern Fall anführe, da er die Schwere der Luft erkandte hat, als, daß er eine sehr grosse gläserne oder auch küberne Kugel durch Hülfe der Luft-Pumpe von der Luft auf das sorgfältigste ausgeleeret, nachdem dieselbe an den langen Arm einer Schnell-Wage gehänget, und alsdann das Gewichte, welches zuvor mit ihm gleich inne gestanden, einen grossen

Ausschlag gegeben. Denn dieses ist eigentlich zu reden die Erfahrung, der Satz aber: die Luft ist schwer, ist daraus geschlossen worden.”

- ⁸ “Facta igitur naturae alia cum lateant (§.20), alia vero pateant (§.1), ita ut haec sola attentione agnoscantur, etsi subinde acumine quodam opus sit; illa vero singularibus artificii in apricum producenda & in apricum producta non agnoscantur, nisi sensui ratio suppetias ferat; cognitionem historicam distinguimus in communem & arcanam.”
- ⁹ “Observatio est experientia, quae versatur circa facta naturae sine nostra opera contingentia. *Experimentum* est experientia, quae versatur circa facta naturae, quae non nisi interveniente opera nostra contingunt.”
- ¹⁰ See, for instance, (Wolff, 1978, pp. 134–135, 181–182; Wolff, 1982, pp. 107–129).
- ¹¹ “daß ein jeder, welcher aus der Erfahrung klug werden will, alle seine Erfahrungen, die nicht täglich vorkommen, mit Bedacht aufschreibe, auch sie nach allen ihren Umständen fleißig untersuche. Absonderlich wenn wir nach unserem Gefallen Dinge in der Natur zusammen gebracht, die sonst nicht würden zu einander kommen seyn, das ist, wenn wir experimentiren, können wir uns um so viel mehr versichern, daß wir alle Bedingungen, unter welchen etwas geschiehet, auf das genaueste in acht genommen, wenn wir unser Experiment zu einer andern Zeit wiederhohlen, oder auch von andern wiederhohlen lassen.”
- ¹² “Psychologiam empiricam Physicae experimentali respondere. Constat enim Physicam quoque experimentalem dogmaticae principia suppetitare.”
- ¹³ “eidem tamen locus est in omni philosophia, ipsa Theologia naturali.”
- ¹⁴ “Man wird es vielleicht für einen bloßen Schertz halten, wenn ich sage, daß ich mir vorgesetzt habe, zu zeigen, wie man die Seele durch Experimente solle kennen lernen. Experimente, wird man sprechen, laßen sich nur mit Körpern anstellen. Wird man aber wohl die Geister unter die Luftpumpe bringen, ihre Gestalten durch Vergrößerungsgläser erblicken, und ihre Kräfte abwägen können? Dieser Gedanke hat so viel scheinbares, daß ich glaube, er werde den meisten einfallen, welchen diese Blätter zu Gesichte kommen.”
- ¹⁵ “Denn, ausserdem, daß man viele Versuche mit Thieren anstellen kann, so geben uns die Wahrnemungen der Artzneygelehrten aller Zeiten solche Begebenheiten an die Hand, da die Seele durch eine ausserordentliche Veränderung des Leibes in einen ausserordentlichen und ungewöhnlichen Zustand gerathen ist, daß man solche billig als Experimente die mit der Seele angestellt worden sind, betrachten kann.”
- ¹⁶ Krüger's own teacher, the physician Friedrich Hoffmann, thus charted over 600 medical cases in the *Consultative Medicine* (*Medicina Consultatoria*), printed in twelve volumes between 1721 and 1739. Other cases in point are Georg Ernst Stahl and his follower Michael Alberti, who both attached great importance to medical cases. (Alberti, 1721; Hoffmann, 1721; Stahl, 1695; Stahl & Storch, 1733). For a recent study of the use of cases in 18th-century German medicine see also (Retzlaff, 2018).
- ¹⁷ “Es wäre auch sehr nützlich, wenn man einige außerordentliche psychologische Fälle, welche sich aus den bekannten Eigenschaften der Seele noch nicht auflösen lassen, in besondern Beyträgen auf das genaueste bemerkte.” See also (Zelle, 2001a).
- ¹⁸ “Aus den vereinigten Berichten mehrerer sorgfältiger Beobachter des menschlichen Herzens könnte eine Experimentalseelenlehre entstehen, welche am praktischen Nutzen alles das weit übertreffen würde, was unsre Vorfahren in diesem Fache geleistet haben.”
- ¹⁹ “Herr Moses Mendelssohn hat mir selber seine Gedanken über den Plan zu diesem Werke mitgetheilt, und die Veränderungen der Benennung Experimentalseelenlehre, welche ich anfangs gewählt hatte, in Erfahrungsselenkunde angeraten.”
- ²⁰ In the first volumes these were accompanied by the two minor categories of “semiotic” (Seelenzeichenkunde) and “dietetics” (Seelendiätetik). In the revision presented in the fourth volume (1786), however, these were abandoned and only the first two remained. For the analysis of cases in the journal see particularly: (Dickson et al., 2011; Leventhal, 2019).
- ²¹ For the culture of sensibility see especially: (Kemper, 1991; Sauder, 1974; Wegmann, 1988). For the emergence of the modern individual and autonomous self see: (Lyons, 1978; Schneewind, 1998; Taylor, 1989).
- ²² “schwärmerisch eingenommen”.
- ²³ “daß das Resultat aus den zusammengehaltenen Beobachtungen so notwendig folgt, wie 5. aus 2.x2.+1.”
- ²⁴ “Den Einfluß der äußern—wirklichen Vorfälle auf den inner Zustand seines Gemüths zu beobachten, verstand Reiser damals noch nicht; seine Aufmerksamkeit auf sich selbst hatte noch nicht die gehörige Richtung erhalten. Indes verbesserte sich doch sein Tagebuch mit der Zeit, indem er anfang, nicht nur seine Begebenheiten, sondern auch seine Vorsätze und Entschliessungen, darin aufzuzeichnen, um noch einiger Zeit zu sehen, was er davon in Erfüllung gebracht

- hätte.—Er machte sich schon damals selber Gesetze, die er in seinem Tagebuche aufschrieb, um sie in Erfüllung zu bringen.—Auch that er sich selbst zuweilen feierliche Gelübde, Z.B. früh aufzustehen, den Tag seine Stunden ordentlich einzutheilen, und dergleichen mehr.”
- 25 "So machte seine Einbildungskraft die meisten Leiden und Freuden seiner Kindheit. Wie oft, wenn er an einem trüben Tage bis zum Ueberdruß und Eckel in der Stube eingesperrt war, und etwa ein Sonnenstrahl durch eine Fensterscheibe fiel, erwachten auf einmal in ihm Vorstellungen vom Paradiese, von Elysium, oder von der Insel der Kalypso, die ihn ganze Stundenlang entzückten.”
- 26 "Der Verdruß, der denn in die Stelle der gereizten Hoffnung trat, war von einer so groben, gemeinen und widrigen Art, daß auch nicht der mindeste Grad von einer sanften Melancholie oder etwas dergleichen damit bestehen konnte. Es war ohngefähr die Empfindung eines Menschen, der ganz vom Regen durchnetzt ist, und indem er vor Frost schauernd zu Hause kehrt, auch noch eine kalte Stube findet.”
- 27 "Beym Erwachen überdachte und prüfte ich den gestrigen Tag. Ich ließ mich in allen Situationen vor meiner Imagination vorübergehen. Wie oft hatte ich Ursache, zu erröthen!—Wie ganz anders seyen und beurtheilen wir uns doch, wenn wir uns bloß mit den Augen eines unpartheyischen Zeugen ansehen. In dieser Absicht wünschte ich mehr Zeit und Fertigkeit im Zeichnen zu haben, um so manche Situationen meines Lebens, die sich kaum mit Worten beschreiben läßt, vermittelt der Zeichnung fixiren zu können.... Wie? Wenn ich das was ich itzt thue, einen andern thun sähe? Einem, der so denkt, wie ich itzt denke, in die Seele hineinsähe? Wenn ich diese Situation durch eine Zeichnung aufbewahrte.... wie würde ich mir dann in den ruhigen Stunden, wo die Leidenschaft schweigt, vorkommen?”
- 28 "Beobachtungen über meinen Charakter: Wenig feine Empfindungen—wenig Rührung—intensiv und extensiv schwache Phantasie—schweres Denken; mühsames Schreiben—abstractes und subtiles Denken, zuweilen Spitzfindigkeit—Unglaube und Zweifelsucht—Kälte, langsame Prüfung, Furcht vor Uebereilung und Schwärmerei; beinahe Aegerlichkeit über den, mit dem ich nicht sympathisiren kann. — Achtung für's Gute, so fern es recht und erhaben ist.—Gewohnheit, das Mangelhafte, die Schranken des Guten und Bösen zu bemerken.—Mäßigung in der Liebe und im Abscheu, Billigkeit, affectfreies Urtheil—Gewohnheit, Unähnlichkeiten schnell zu bemerken, Scharfsinn.—Unterlassungssünden aus Mangel an Eifer.”
- 29 "So mannigfaltig, so zusammengesetzt ist das Schauspiel, welches die menschliche Seele vorstellt; und wer ist nun der Zuschauer desselben? Sie selbst ist zugleich Schauspielerin und Zuschauerin; ein Umstand, welcher in der Psychologie die größte Schwierigkeit verursacht.”
- 30 "gleichet einem schnellfließenden Strome, der sich immer gleich zu bleiben scheint, und doch immer verändert wird.”
- 31 "Man muß sehr viele einzelne Beobachtungen sammeln, ehe man ein gewisses Resultat daraus herleitet, und niemals vergessen, daß Begebenheiten, die man observiert, individuelle Fälle sind, von denen sich nur vieler Behutsamkeit und Vorsichtigkeit auf das allgemeine schließen läßt.”
- 32 "Man muß die Erscheinungen der Seele lieber mit allen ihren Nebenumständen anmerken, als sie aus dem Zusammenhange reißen, wo sie öfters ein ganz anders Ansehen bekommen. Ohne diese Regel zu Beobachten, ist es oft unmöglich, aus anscheinenden Widersprüchen sich herauszuwickeln.”
- 33 "Man muß selbst Kleinigkeiten, und zufällige Aeußerungen, so geringe sie auch scheinen, nicht übergehn.”
- 34 "Die modifikationen der Seele so nehmen, wie sie durch das Selbstgefühl erkannt werden; diese sorgfältig wiederholt, und mit Abänderung der Umstände wahrnehmen, beobachten, ihre Entstehungsart und die Wirkungsgesetze der Kräfte, die sie hervorbringen, bemerken; alsdenn die Beobachtungen vergleichen, auflösen, und daraus die einfachsten Vermögen und Wirkungsarten und deren Beziehung auf einander aussuchen; dieß sind die wesentlichsten Verrichtungen bey der psychologischen Analysis der Seele, die auf Erfahrungen Beruhet. Diese Methode ist die Methode der Naturlehre.”
- 35 "wogegen ich kein Mittel weiß, das wirksam genug wäre, um sich dafür zu verwahren, als die wiederholung derselbigen Beobachtung, sowohl unter Gleichen, als unter verschiedenen Umständen, und jedesmal mit dem festen Entschluß vorgenommen, das, was wirkliche Empfindung ist, von dem, was hinzu gedichtet wird, auszufühlen, und jenes stark gewahr zu nehmen.”
- 36 "Eine der vornehmsten Operationen bey der beobachtenden Methode bestehet in der Verallgemeinerung der besondern Erfahrungssätze, die aus einzelnen Fällen gezogen sind.”
- 37 "Am Ende sind es doch die Reflexionen und Schlüße, die die simplen Beobachtungen erst recht brauchbar machen, und ohne die wir beständig nur auf der äußern Fläche der Dinge bleiben müßten.”
- 38 "Aufmerksame, mit Bewußtseyn vorgenommene, anhaltende, den Gegenstand von allen Seiten umfassende und oft wiederholte Wahrnehmung verdient ers den Namen der Beobachtung, und derjenige den Namen eines Beobachters, der schon die Fertigkeit und die herrschende Neigung hat, auf die beschriebne Art wahrzunehmen. Aufmerksamkeit

und Festhalten des zu beobachtenden Gegenstandes, längere Beachtung deßelben und öftere Wiederholung dieser Operationen der Seele, macht also das Wesen der Selbstbeobachtung aus."

- 39 "Ueberdem darf man nur einmahl dieselbe Beobachtung mit gleicher Genauigkeit wiederholt haben, um sich zu überzeugen, daß man keinen Gegenstand mit einem Mahl erschöpft. Selbst nach der tausendsten Wiederholung derselben Beobachtung, bleibt uns noch immer etwas zu entdecken übrig."
- 40 "Er vergleicht gegenwärtige Erscheinungen seiner Seele mit ehemaligen, unterscheidet das Seltnen von Gewöhnlichen, und hat so gut sein Naturalienkabinet, wie die Naturforscher, wo er die Seltenheiten besonders bemerkt und alles in seine Classe und Ordnung bringt."
- 41 "Daher ist die Methode in der Psychologie, wie in der Physik und Chemie. Alles muß aus andern Erscheinungen erklärt werden; und metaphysische Behauptungen und transcendente Hypothesen sind die wahren qualitates occultae."
- 42 "Man sammelt zuerst durch Beobachtung und Versuche eine Menge einzelner Wirkungen, und sucht durch ihre Vergleichung nach den bekannten allgemeinen Erfahrungsgesetzen, allgemeine Regeln zu entdecken, die zur Erklärung vergangener und künftiger Erscheinungen dienen."
- 43 "Ein eignes Talent, für lebhaft und feine Empfindung und bestimmte Anschauung des innern Sinnes und für Abstraktion von der Aussenwelt."
- 44 "Unbefangenheit von vorgefassten Meynungen über die menschliche Seele", "Uebung im Beobachten überhaupt", "Bekanntschaft mit dem zu erforschenden Gegenstande", "Kenntniß der besondern Umstände, die das Geschäft der geistigen Beobachtung erschweren."
- 45 "Menge dessen, was zu beobachten vorkommt," "Mannigfaltigkeit des Stoffes," "Continuität der Erscheinungen," "Unaufhörlicher Fluß und Wechsel," "Verworrenheit und Dunkelheit," "Unbemerkbare Kleinheit," "Unmöglichkeit einer mathematischen Darstellung," "Unmöglichkeit der realen Zergliederung und absichtlicher Versuche."
- 46 "sey auf Kleinigkeiten aufmerksam," "verachte nicht das Alltägliche und Gemeine," "oberflächlichen, flüchtig aufgerassten, unbestimmten", "gemeine und persönliche vorurtheile, oder auch Neigungen und Leidenschaften auf die Beobachtung haben," "der Fortsetzung des Beobachtens in den Weg treten, oder die Unparteilichkeit desselben zerstören," "sich seine gemachten Beobachtungen schriftlich aufzuzeichnen, und in einem zweckmässig angelegten und geordneten psychologischen Magazin aufzubewahren."
- 47 "Psychologie als Wissenschaft."
- 48 "Allgemeine Erfahrungsbegriffe und empirische Regeln zu entdecken, die sich unter die reinen Naturgesetze subsumiren lassen."
- 49 "Diese Regeln und Begriffe immer mehr zu verallgemeinern, sich einander bey und utnerzuordnen, und bis zu Grundkräften und Grundgesetzen des Geistes aufzusteigen."
- 50 "sollen nicht nur rohe Materialien niedergelegt, sondern auch Versuche mitgetheilt werden, die schon vorhandenen Stoffe unter allgemeine Begriffe zu ordnen, und Naturregeln von möglichster Allgemeinheit, Bestimmtheit, systematischer Verbindung und einleuchtender Gewissheit aufzustellen."

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