12 Tetens on the Nature of Experience
Between Empiricism and Rationalism

Clinton Tolley and R. Brian Tracz

1 Tetens and the Critical Reception of Empiricism in Germany

As recent scholarship has documented,[1] the writings of Johann Nikolaus Tetens (1736–1807) served as one of the key channels of transmission of the views of empiricist philosophers such as Locke and Hume to Germany during the period between Leibniz and Kant. Despite the tendency to caricature eighteenth-century German philosophy prior to Kant as predominantly rationalist, there was an unmistakable increase in interest in the empiricists in the 1750s, brought about in no small part by the translation of some of their works into German. Hume's *Enquiry Concerning the Human Understanding* was translated by Johann Georg Sulzer in 1755, with the title rendered as *Philosophische Versuche über die menschliche Erkenntnis*; Locke's *Essay Concerning Human Understanding* was translated in 1757 by Heinrich Engelhard Poleyen as *Versuch vom menschlichen Verstande*.[2]

A comparison of these titles with that of Tetens's own 1777 masterwork, his *Philosophische Versuche über die menschliche Natur und ihre Entwickelung* (*Philosophical Essays on Human Nature and Its Development*), suggests that Tetens intended, at the very least, to be in conversation with Locke's and Hume's *Versuche*.[3] This intention is confirmed by Tetens's opening remarks in the *Philosophical Essays* itself, where he states explicitly that the method he will be pursuing in his work is the "observational [*beobachtende*] one that Locke pursued with the understanding" (PV I, iii–iv)—albeit by encompassing not just the understanding but also "the active power of willing, the basic character of humanity, freedom, the nature of the soul, and its development" (PV I, iii). With respect to his account of the understanding or power of thinking (*Denkkraft*) itself, Tetens's views might seem to tend toward an even more radical empiricism than Locke's, insofar as this account is not only preceded by an account of sensation (*Empfindung*) and feeling (*Gefühl*), but eventuates in the claim that "all ideas and concepts are without exception processed [*bearbeitete*] representations of sensation" (PV I, 340). Remarks such as these are surely behind the estimation codified in a later remark by Hegel's student and biographer Karl Rosenkranz, who in 1840 dubbed Tetens

"the German Locke."[4] More generally, these remarks have led many readers to attribute to Tetens some version of empiricism, over and against the Leibnizian commitment to concepts or ideas that are in some sense innate, i.e., drawn from a source other than sensation or perception.[5]

As we will argue below, however, a closer look at Tetens's account of the 'processing' that is involved in concept formation shows that his work bears a much more complicated relation to empiricism than is commonly acknowledged.[6] For one thing, in the *Essays* itself, as well as in his earlier 1775 essay *Über die allgemeine speculativische Philosophie* (*On Universal Speculative Philosophy*), Tetens in fact shows himself to be quite sympathetic to specifically Leibnizian arguments concerning the impossibility of accounting for the origin of all of our concepts on the basis of sensation alone. Perhaps most importantly, he endorses Leibniz's claim that concepts such as substance and cause must have a non-empirical origin.[7] What is more, Tetens goes beyond what he takes to be found in Locke and Hume's accounts by rigorously differentiating between the mere having of a sensation in the mind and what must be involved over and above sensation for a mental state to merit the name of experience (*Erfahrung*). Finally, Tetens takes an even more decidedly non-empiricist line on the source of our cognition by arguing—in a way that echoes Leibniz's own criticisms in the Preface to the *Nouveaux Essais*—that neither sensations nor even experiences suffice to account for our knowledge of universal and necessary principles and the laws treated in philosophy and psychology in particular.[8]

While the foregoing remarks indicate obstacles to any simplistic characterization of Tetens as an empiricist, they also help clarify which exact elements of Locke's approach Tetens nevertheless meant to endorse. As we will also show below, Tetens's criticism of the 'mathematical' methodology of the Leibnizians makes clear that he finds an important virtue in Locke's contrasting 'developmental' or 'synthetic' approach to the understanding and its cognitions. Tetens thinks that only a version of Locke's method might be able to address Hume's rightful challenge concerning the alleged objective validity of the concepts and principles presented within ontology or *metaphysica generalis* as well as within *metaphysica specialis*, psychology included. Tetens's own positive proposal in his *Essays* is to make use of a broadly Lockean method to demonstrate concretely and directly, by means of 'observation,' how actual mental phenomena emerge developmentally in relation to sensation and grow into experiences in a way that is coordinate with the system of concepts and principles presented only abstractly in the Leibnizian textbooks on psychology. Thus, Tetens aims to move philosophy forward by complementing the Lockean observational method with that of Leibnizian systematization, albeit that the technical terminology he uses to describe the different stages of the mind's development is drawn almost entirely from the Leibnizians rather than the empiricists.

2 From 'Experience' to '*Erfahrung*': The Reception of British Empiricism in Post-Leibnizian German Philosophy

As was noted above, Tetens's mature philosophy—as represented in the 1777 *Essays*, along with his programmatic essay of 1775—came to fruition during the reception of British empiricism in Germany, which was facilitated by the publications of German translations of Hume (1755) and Locke (1757) as well as by the first (posthumous) publication of Leibniz's *Nouveaux Essais* (1765). One key step in assessing Tetens's relation to British empiricism and what he himself means by 'experience,' then, consists in becoming familiar with the German psychological terminology that was used to convey these positions to the new audience.

In the 1757 translation of Locke's *An Essay Concerning Human Understanding*, for example, the claim that experience is that in which "our *knowledge* is founded" and "from which it derives itself" (II.i.2) is rendered by Poleyen as the claim that *Erfahrung* is that in which "our *Erkenntnis* is grounded (*gründet*) and originates (*ihren Ursprung nimmt*)."[9] When Locke then splits experience itself into two "fountains," according to whether our observation is "employed either about external sensible objects, or about the internal operations of the mind, *perceived* and *reflected on* by ourselves" (II.i.2), the translation has it that our *Beobachtung* is occupied with either "outer objects" or with "inner effects of our soul that we *empfinden* and *überdenken*."[10] What Locke calls 'sensation,' that is, the outer source of ideas, is rendered as *sinnliche Empfindung*, whereas the term 'reflection,' which denotes the inner source of ideas, is rendered as *Überdenken*.[11] The term 'idea,' which denotes that which these two sources supply to the mind, or what our mind has before itself when it is *conscious* (*bewußt*) and when it thinks (*denkt*), is rendered as *Begriff* (concept).[12]

In the 1755 translation of Hume's *Enquiry*, we find a largely parallel usage, along with a few further terms worth flagging that concern Hume's analysis of the origin of ideas. Hume's claim that thoughts or ideas and impressions are two classes or species of perceptions is rendered by Sulzer as the claim that *Gedanken* or *Begriffe* (concepts) and *Eindrücke* (impressions) are two classes or species of "*Empfindungen* in der Seele."[13] *Begriffe* are then designated as those *Empfindungen* that "we are conscious of when we reflect [*nachdenken*] on impressions [*Eindrücke*]."[14] *Begriffe* are also said to arise when the "capacities of the mind mimic [*nachäffen*] or copy [*abcopiren*]" previously had sensations.[15] Hume's claim about the origin of our ideas in copies of impressions thus becomes the claim that "all of our concepts or more feeble sensations [*Empfindungen*] are outlines [*Abrisse*] of our impressions [*Eindrücke*] or lively sensations [*Empfindungen*]."[16] Capacities that are capable of bringing about these copies include memory (*Gedächtnis*)

and the power of imagination (*Einbildungskraft*); the capacity for engaging with *Begriffe* and *Gedanken* themselves is again that of *Denken* (thinking).[17]

Given our purposes, two points concerning these translation choices are especially worth highlighting. First, we find that the term *Empfindung* is used to track the elementary stage of what initially arises in the mind or the soul due to impressions upon it, which is to say that the term covers over the distinction between the English terms 'sensation' and 'perception.' By contrast, the term *Begriff* is used to track the contents of thinking, or what arises in consciousness through reflection or the act of thinking over something. Second, we find a fairly capacious use of the term *Erfahrung*. In line with the broad use of the term 'experience' by Locke and Hume, it denotes not only mere *Empfindung* but also acts of *Beobachtung* and *Nachdenken* or *Überdenken*.

As we will see in the following section, Tetens's *Essays* go beyond both Locke and Hume on both fronts: he not only more sharply delineates the different stages involved in the transition from mere sensation to thought but also more sharply differentiates mere sensation from what merits the name of experience—not least by considering only the latter to involve acts of thinking and, more specifically, acts of reflection and representation through concepts.

Before turning to Tetens's own analysis, however, we should attend to the exposition of the term *experientia* in several Latin texts that Tetens would have been familiar with from the Leibnizian tradition in early modern German philosophy, for many of the conceptual and terminological distinctions that Tetens himself draws upon, in departing from the simplistic empiricism he attributed to Locke, Hume, and some of the French psychologists, are already present in the writings on empirical psychology by Christian Wolff and Alexander Baumgarten.

In Wolff's 1732 *Psychologia empirica*, for example, we find a sharp distinction, first, between mere *perceptio*, as one of the initial "acts of mind which represent" some object (PE § 24), and *apperceptio*, which is said to consist in the mind's being conscious (*conscia*) of a perception.[18] According to Wolff, all thought (*cogitatio*) "involves both perception and apperception" (PE § 26). Sensations (*sensationes*), by contrast, are cases of mere perception (PE § 65). Experiencing (*experiundo*) goes farther than thinking, insofar as it involves not only being conscious of things or "attending to that which we perceive" but also having cognition (*cognitio*) (PE §§ 434–35).[19] Cognition itself is achieved when we are not only "attending to our thoughts," and not only "noticing in what way some object is represented" in a perception, but also noticing "what sort of a change [*mutatio*] occurs in the soul" (PE § 28)—seemingly, a change due to the object which the perception represents.[20]

Baumgarten adopts this set of Latin terms and coordinates them with German terms in footnotes in his textbooks on logic and metaphysics. In

his 1761 *Acroasis logica*, he translates *cognitio* as *Erkenntnis* (AL § 3). Using *Erfahrung* as the German correlate for *experientia*, he defines "experience in the broad sense" as "clear cognition by sensations [*clara cognitio per sensationem*]." By contrast, "experience in the strict sense" is defined as "cognition by immediately acquired sensations" (AL § 163). In the fifth edition of Baumgarten's *Metaphysica* (1763), we learn that sensation—rendered as *Empfindung*—is the mere "representation of my present state" (M § 534).[21] It is contrasted with experience (*experientia*, *Erfahrung*), which consists of "clear cognition through sense" (M § 544). Here, the adjective 'clear' signals that consciousness accompanies the relevant representations in the form of "attention" (cf. M § 529).[22] In both the *Metaphysica* and the *Acroasis logica*, the term 'perceptio' is translated as 'representation' (*Vorstellung)*. An apperceived perception (*perceptio appercepta*), by contrast, is called a thought (*cogitatio*, *Gedanke*) (cf. AL § 15). A constituent of a thought is not a mere representation but a *concept* (*conceptus*, *Begriff*) (AL §§ 16–17).[23] Hence, insofar as experience itself involves apperceiving perceptions (sensations), it too will involve thoughts and concepts.

3 Tetens on the 'Development' of Experience from Sensation

With this historical context in mind, we should be less surprised to find that Tetens himself couples his positive remarks about the contributions of the empiricists with a clear recognition of the importance of at least supplementing, if not correcting, their accounts with the more subtle analyses emerging from the Leibnizian school. This can be seen already in Tetens's Preface to *On Universal Speculative Philosophy*. After applauding the observational method of the British philosophers, Tetens insists upon the need to complement their findings with what can been learned from the rational (*raisonnirende*) method of the French (Bonnet, Condillac) and especially from "the geometrical genius of the Leibniz-Wolffians" (ASP 3–4, cf. 18). Tetens goes even further in this direction in the assessment he gives in the concluding section of the essay:

> As I see it, our Leibniz had a much deeper, sharper, and more correct insight into the nature of human understanding [and] its modes of thought [...] than the more diligently observational Locke. He has seen farther than the sharp-sighted Hume, than Reid, Condillac, Beattie, Search, and Home. (ASP 91)

As we will see in a moment, this prioritization of Leibniz over Locke and Hume manifests itself concretely in the body of Tetens's *Essays*, insofar as Tetens models his core technical terminology not on that of Locke or Hume but on that of the Leibnizian-Wolffian tradition. This point

has often been overlooked, which is likely due in large part to Tetens's positive portrayal of Locke right at the start of the Preface. Here Tetens describes the method he means to pursue as nothing other than the "observational method that Locke pursued in relation to the understanding and that our psychologists pursued in the experiential doctrine of the soul [*Erfahrungs-Seelenlehre*]" (PV I, iii–iv). As Tetens puts it later in the *Essays*, "the soul is given to us not by hypotheses, but by observations" (PV I, 730). Accordingly, the powers of the human soul "can only be cognized through the effects that they bring about in us" (PV I, 730, cf. 733).

Even so, once Tetens goes on in the Preface to elaborate upon the stages he takes to be involved in pursuing such a method, we can already notice the pervasive echoes of the Leibnizian terminology:

> To take the modifications of the soul such as they are cognized through self-feeling [*Selbstgefühl*]; to take with awareness [*gewahrnehmen*] and observe [*beobachten*] these repeated modifications with care and with alteration in circumstances, and notice [*bemerken*] their way of arising and the laws of effect of the powers that bring them forth; thereafter compare [*vergleichen*] the observations, analyze them and search out the simplest faculties and species [*Arten*] of effect and their relations to one another—these are the essential accomplishments of the psychological analysis of the soul, accomplishments which rest upon experiences [*Erfahrungen*]. (PV I, iv)

In effect, Tetens is describing the observation to be performed by the philosopher as a process the stages of which parallel the Leibnizian ordering of the mind's development of basic cognition that was sketched above. Yet now this observation is directed at the workings of the mind itself: first, we have sensations of our mind's activity ('self-feeling'), then we take up these sensations with 'awareness,' after which we come to have 'cognition' of the mental activity itself by generating general concepts of the types (or 'species') of sensations as well as propositions which express their relations to one another.

As we will see in the following section, the end of the *Essays* further confirms that Tetens applies Leibnizian distinctions to the stages of reflective-philosophical cognition of the mind's own workings. In the early parts, however, Tetens's text primarily aims to give an account not of reflective-philosophical cognition but of ordinary, day-to-day sensory cognition, including the kind that Tetens himself calls 'experience.'

The fact that Tetens is Leibnizian rather than Lockean or Humean about the nature of experience becomes readily apparent in these early parts of the *Essays* as well. Tetens here proceeds to articulate a series of stages in the 'development' of what happens in the soul on the

road to experience that parallels quite closely the one identified by the Leibnizian-Wolffian system sketched above. In broad outlines: first, Tetens takes up the general idea of a *representation* (Essay 1). He then focuses specifically on how representations arise in relation to *sensation* (Essay 2). This leads to an analysis of what is further required for the *consciousness* or *apperception* of representations of sensation—in Tetens's preferred terms, for *becoming aware* of them (Essay 3). Only at this point does Tetens introduce the topic of what it means to *cognize* something objectively on the basis of this awareness (Essay 4). And it is only much later, under the heading of "sensory cognition and the faculty of thinking active within it" (PV I, 426), that he finally takes up the topic of *experience* itself.[24]

While this account already places Tetens, on the whole, on the side of the Leibnizians, there is at least one point on which he might be thought to take up a more Humean position. This is because Tetens revises the Leibniz-Wolff scheme at its very first stage by incorporating the distinction between sensation per se (qua mere impression) and its representation (viz., idea). This revision comes in two steps. First, whereas, for Leibniz and Wolff, the term 'representation' (as a correlate of *perceptio*) ranges over "every modification of our soul" (PV I, 8), Tetens thinks this usage stretches the term beyond its common significance. Accordingly, he restricts the use of the term to "those modifications in us from which another thing can be immediately cognized *by us*" (PV I, 11). Even if the Leibnizians are correct in thinking that every single effect in us mirrors or corresponds to something real (namely, its cause), we humans are not immediately in a position to cognize every single thing (cause) that is so mirrored simply because of the presence in us of the relevant effect.[25] Some modifications in us are nothing for us in the sense of meaning anything for us proto-cognitively but are simply that: modifications.

Second, Tetens insists that the first genuine representations in us—the first modifications in us that mean something for us—are actually representations *of other modifications in us* that have already occurred. When such modifications leave traces (*Spuren*) in us, our soul is then able to take up these traces, or "drawings" (*Zeichnungen*) of the previous modifications, so as to bring about representations of these earlier modifications (PV I, 16).

These "original basic representations" (*ursprüngliche Grundvorstellungen*) constitute the basis from which all other representations are developed (PV I, 17). More specifically, Tetens thinks that these "original representations arise in us of our alterations and states, when the latter are presently occurrent in us, and become felt and sensed [*gefühlt und empfunden*]"; these felt or sensed alterations or modifications are called 'sensations' (PV I, 22). The sensation itself (the modification that is sensed) is to be distinguished, however, from the representation which arises due to the sensing of the modification. That is, sensations

themselves are thus not technically the first original representations; rather, they are what is represented by these first representations, which are accordingly called "representations of sensation" (*Empfindungsvorstellungen*) (PV I, 23).

However, the capacity for producing representations, which Tetens, in accord with the Leibnizians, also names *Perceptionsvermögen* (PV I, 26), is not limited to the taking up or apprehending of sensations,[26] as it can also reproduce previous representations (PV I, 24) and "combine representations themselves into new wholes" (PV I, 127). The reproductive power is what Tetens calls 'the power of imagination' (*Einbildungskraft*), whereas the creative, self-active power is called 'fantasy' (*Fantasie*) or 'fictive power' (*Dichtkraft*).[27]

Taking the foregoing together, then, we can see Tetens actually signaling a twofold appreciation of Hume's attempt to take up a question that the Leibnizians seemed to take for granted. First, Tetens agrees with Hume on the necessity of accounting for the origin of representations themselves (that is, of 'ideas' understood as Leibnizian *perceptiones*), insofar as they seem to arise out of more elementary non-representational yet still mental occurrences. Second, Tetens also stands close to Hume in considering the imagination to be involved in the transformation of mere sensations into representations.[28]

With this important clarification in hand, however, we can see that the remaining structural differentiation in Tetens's account of the development from sensation to cognition remains quite close to the Leibnizian analysis discussed above. For even though Tetens insists that representation is something over and above mere sensation, he agrees with the Leibnizians that having a representation does not yet suffice for *consciousness* of this representation, let alone for any sort of *cognition*. As regards the first point, Tetens criticizes Bonnet and Condillac for failing to recognize the important difference in kind between, on the one hand, mere sensing and feeling and, on the other, acts of the understanding (*Verstand*) such as becoming conscious (*Bewußtwerden*), apperception, and thinking (PV I, 7). It is only once we have consciousness of a representation—or take it up with awareness—that we have what Tetens refers to as an idea (*Idee*) or thought (*Gedanke*) (PV I, 26, 96).[29] According to Tetens, moreover, consciousness brings with it a "distinguishing of one image from another."[30] This act of distinguishing gives rise to concepts (*Begriffe*) (PV I, 135), takes the form of judgments (*Urteile*) (PV I, 26), and is a prerequisite for the most elementary form of cognizing (*erkennen*).[31]

Thus, Tetens agrees with the Leibnizians, against Hume and Locke insofar as their views are transmitted through the German translations, that it is only once all three powers of the soul (sensation, representation, and consciousness) are involved that the soul itself arrives at the threshold of experience (*Erfahrung*). Whereas Locke and Hume seemed

willing to let 'experience' range over the mere having of a sensation, for Tetens, "the word 'experience', as it commonly occurs, is only used for the cognition of things (*Erkenntnis der Sachen*)" (PV I, 429). For this reason, neither sensation, nor the mere representation of sensation, nor even the conscious judging of representations (of sensations) themselves amounts to experience in the sense of the cognition of things distinct from one's own mental events.

To clarify this point, Tetens introduces the idea of pure experience (*reine Erfahrung*) (PV I, 429). Pure experience is 'pure' in the sense that it is elementary, i.e., does not involve any additional alteration by imagination, fantasy, or any further development through reasoning.[32] More specifically, pure experience is "the action of the power of thinking that judges on the basis of [*durch*] sensation, or rather, that determines something on the basis of the representation of sensation of the object that is presently there in us [*gegenwärtig vorhanden*]" and that "holds things to be as they are" rather than "as they appear to be in individual observations" (PV I, 429). It is these pure or elementary experiences—and not mere sensations or even representations of them—that, in turn, "constitute the pure and fixed material [*Stoff*] of *all* the cognitions [*Kenntnisse*] we can have of actual things [*wirkliche Dingen*]" (PV I, 430, our emphasis).

4 Tetens on 'Observation' as a Philosophical Methodology

In the previous section, we saw that Tetens, largely drawing on his Wolffian predecessors, envisions a suite of mental activities that develop from sensation, through representation and consciousness, into experience as sensory cognition—thereby rejecting the tendency, present in the translations of Locke's and Hume's work, and perhaps in the originals themselves, to take sensation *itself* to be already a kind of experience. What we now want to turn to, however, is a key difference between Tetens and the Leibnizians as regards their *method* of presenting these distinctions and, correspondingly, a key continuity that Tetens sees between his own approach and the 'observational' method represented by Locke that he repeatedly praises.

Tetens's distance from the Leibnizian-Wolffian approach is of a piece with his post-Humean critique of the so-called mathematical or geometrical method of presentation favored by Wolff and Baumgarten, as can be seen already in his earlier *On Universal Speculative Philosophy*. With respect to psychology, Tetens thought that Hume had convincingly cast doubt on the idea that this putative science of the human understanding and the cognitions it produces was already anything like a genuinely established science that only required further systematization. For this reason, Tetens thinks that we need to complement, and

ideally precede, any putative systematic presentation (via "synthetic speculations") of such psychological concepts with a philosophical presentation of the source of these concepts in psychical realities themselves, according to what he calls "the analytical method" of Locke, Hume, and others (ASP 84-86). The latter procedure would demonstrate, by a kind of ostension within inner "observation," how more complex kinds of psychical realities developmentally arise out of more elementary ones (ASP 84).[33]

As regards its basic ambitions, if not in its ultimate execution, Tetens considered this synthetic method to be modeled not on Wolff or Baumgarten but on Locke's *Essay*. In *On Universal Speculative Philosophy*, Tetens claims explicitly that, in order to provide the "proofs" of the objective validity of elementary concepts and propositions that is rightfully demanded by Hume, one must "go back along the path down which Locke has already traveled, namely, to the investigation of the understanding, its mode of acting, and its universal concepts" (ASP 35). What Tetens thinks has actually been provided by Locke, however, is not really the proofs themselves, but rather "the criteria [*Kennzeichen*] by which real representations, those that have objects corresponding to them, can be distinguished from what are merely appearances and so merely one-sided representations" (ASP 35). As he puts it later in this essay, Locke "has led the way, with the torch of observation in hand," to the present project, which consists of "seeking out the sensations out of which the universal notions have been drawn" (ASP 72). Such a method contrasts with that of the textbooks of the Leibnizians, which, at least as Tetens reads them, usually presuppose or ignore the genesis of universal notions.

Here again, however, Tetens takes the Locke-Hume model to call for some modifications. More specifically, he insists on the need to present the development from sensation to concepts in a way that "distinguishes these concepts more precisely than Locke had done from the effects of our creative power of fiction [*Dichtkraft*]" (ASP 72). And though he notes that Hume had demonstrated the need for more precision on this point in his *Enquiry*, Tetens thinks that Hume was unable to "overcome the many difficulties that have been found" in Locke's account (ASP 73; cf. 76).[34] Regarding basic ontological concepts like 'substance' and 'causality,' Tetens agrees with Hume that their content could never be discovered merely by citing various sensations. Against Hume's attempt to root such content in the workings of the imagination, however, Tetens takes the non-sensory content of these traditional ontological concepts to be supplied by the understanding itself, insofar as its activity consists in the processing (*Verarbeitung*) of sensations into something else, rather than merely abstracting contents from them (ASP 50).[35] Concepts such as 'actuality' and 'substance' are instances of "the universal which, in separation from everything particular that our fantasy [*Phantasie*]

might make of it, contains *nothing* that depends on the properties of inner or outer sensations" (ASP 56; our emphasis). It is thus only "the understanding in its purity"—i.e., in its independence from sensation—that is capable of supplying the concepts and principles of ontology (ASP 57). This is because

> the fundamental science should contain the *universal principles* according to which we judge and infer about *all* things in general, about *all genera of actual beings*, about spirits and bodies, about the immaterial and the material, about the infinite and the finite. (ASP 51)[36]

Strikingly, Tetens takes this also to rule out the idea that *experience* might serve as the source for these concepts. As he puts it in the *Essays*, "[w]e must first of all discard the thought that the *universal necessary principles* are *abstractions from experiences*." Whereas "individual examples can make such universal principles intelligible, and illuminate them, […] the insight that they are universal principles does not depend on induction" (PV I, 466) but on "the power of thought's mode of operating" (PV I, 468–69).

Hence, though Tetens agrees with Locke and especially Hume that, in order to clarify the genuine content of our fundamental concepts, we must attend to the way concepts or ideas arise from the way the mind "reworks [*umarbeitet*] sensations into representations" (ASP 38), he stridently denies that the content of concepts like that of causal connection ultimately depends on any particular sensation, act of imagination, or even experience. On his account, these concepts do not result from abstraction or induction but arise solely from "an inner self-activity of the *understanding*" (PV I, 320).[37] Indeed, Tetens sees this unmooring of the special contents generated by the understanding from any source in the senses as of a piece with Leibniz's revision of the Aristotelian rule that "nothing is in the intellect which was not first in the senses" by the addition of: "except the intellect itself" (cf. PV I, 336–37).

Yet though Tetens shares this key commitment to an ultimately non-empirical source of the basic concepts of ontology with Leibniz, he thinks that even the latter failed to adequately justify his presumption of the objective validity of these concepts or sufficiently demonstrate their applicability to our observations of the activities of the mind itself. In Tetens's words, while Leibniz excels in "*forming* true and real concepts," he does little to "*prove* their reality" (ASP 92; our emphasis). Similarly, he writes:

> When Clarke demanded a proof from him [Leibniz] of his principle of sufficient reason, he answered only that it is an axiom of reason [*Axiom der Vernunft*] to which no instance can be opposed, but that

> he knew of nothing further that would furnish support for this last assertion. (ASP 92–93)[38]

What Tetens himself attempts to achieve in his *Essays*, then, is a two-step project. First, he takes up the prima facie insightful psychological distinctions he finds in the Leibnizian-Wolffian school and then uses the Lockean developmental procedure to let his readers 'observe' for themselves that many of the concepts systematically presented in the Leibnizian metaphysics textbooks do in fact have their origin in the workings of the power of thought itself. Second, Tetens thinks he can use this genetic account to secure that these basic concepts do in fact correspond to some 'reality' (cf. ASP 27ff.).

What the first step in the 'observational' method presupposes, however, is that the *psychological* concepts that the Leibnizians make use of to articulate the nature of the soul and its powers—and in particular, the concept of power itself, in relation to the power of thought—are concepts that themselves have objective validity, at least within the reality of the mind. Thus, the primary 'observations' from which Tetens starts in the *Essays* concern the real unfolding of acts of the soul, which thereby have the function of making, e.g., the "nature of representation familiar." On this basis, Tetens sets forth a "series of propositions from experience [*Erfahrungs-Sätze*]" that express "immediate observations and immediate consequences of these," concerning what representations are like (PV I, 12). Though subject to certain deceptions (*Blendwerke*), this sort of observation is a kind of inner experience, based on "inner sense," that can be honed and trained through the "repetition of the same observation" in "various circumstances" (PV I, xvii). When well-trained, a subject can distinguish an observation of "what is actually sensation" from a deception due to what is merely "invented" (PV I, xvii). Observation in this sense is Tetens's name for the elementary access we have to representations merely insofar as they "are in us, in the thinking person."[39]

With respect to the specific mental act of judging, for example, Tetens acknowledges the need for (inner) observation on the part of the philosopher in order to form the very concept of judgment:

> If a concept of this act of understanding, or of its effect, is to be attained, then it must happen in the same way as those concepts of other accomplishments, alterations, activities, and powers of the soul. The act of thinking and of judging must be felt and sensed in its immediately suffered and persisting effects; and this felt modification has its residual sensation [*Nachempfindung*], and leaves behind its reproducible trace. Here is the representation, and therefore the material of the idea of the thought that, when isolated, perceived, and distinguished, becomes an idea of the relational thought [i.e.,

> judgment]. […] Therefore, as experience teaches, it is also impossible to furnish someone with a concept of an actual connection of things who has never thought of such a connection beforehand, who has never sensed and reproduced this thought. (PV I, 339)

On the one hand, the progression that Tetens telescopes in this paragraph broadly mirrors that of the Leibnizians: he moves from the sensation of a judging, to its representation, and eventually to the concept ('idea') of a judgment.[40] On the other hand, his basic thesis about psychological concept formation ultimately bears much closer resemblance to a form of empiricism, insofar as he claims that the formation and possession of the real concept of judgment depends on having an inner sensation and, consequently, an inner experience or *observation* of an actual act of judging itself. Whether or not this seemingly sensation-based account of the origin of our psychological concept of judging can ultimately be made consistent with the earlier idea that reflection on the activity of the power of thought itself will demonstrate the non-sensory origin of other ontological concepts, as arising from acts of judging, is something we take up in the concluding section below.

5 Conclusion: Tetens's Proto-Kantian Synthesis of Empiricism and Rationalism

In his attempt to synthesize the position represented by Locke and Hume with the one represented by Leibniz and Wolff, Tetens embraced a turn toward experience in several respects. First, Tetens accepted the importance of the distinction in Leibnizian-Wolffian Latin textbooks between sensation as mere representation or perception and, on the other hand, experience as involving both apperception and cognition. Accordingly, he contributed to the recognition of the complexity and the distinctiveness of experience within German philosophy. Along the same lines, we have seen that Tetens rejected the lack of this distinction in the British empiricists (at least as they were translated), according to which 'experience' can range over both mere sensations (impressions) and more complex acts that involve concepts, reflection, and so on.

Second, Tetens nevertheless sides with empiricism on the necessity to appeal to what can be 'observed' in the mind as arising through its own activities in relation to sensations, for only in this way can the validity or 'reality' of the fundamental principles and concepts employed in psychology, the science of human nature more generally, and ontology be justified.

To be sure, this alliance is complicated by the fact that Tetens also means to embrace a broadly Leibnizian account of the genesis of the contents of the elementary concepts and principles of ontology, according to which the content of such concepts and principles is, at least in principle, grounded only in the capacity for thinking itself, and not in the senses

or even experiences. Furthermore, Tetens sides with the Leibnizians in denying that the power of thinking can be reduced to the senses, the power of representation, or, by extension, the power of imagination.[41]

How, then, are we to understand that basic psychological concepts, on the one hand, are acquired only through inner sensation and have objective validity only insofar as they can be applied in inner observation, but, on the other hand, do not depend for their content on sensation and experience but only on the power of thinking itself? At this point, of course, we have reached one of the central difficulties that is taken up in earnest a few years later in Kant's first *Critique*, namely, the claim that whereas all cognition might "begin with" experience, not all cognition ultimately "arises from" experience, as Kant puts it in the tantalizing first sentence of the second edition (B1).

In fact, a closer look at Kant's own analysis of experience illuminates Tetens's earlier attempted synthesis of Locke and Leibniz in several respects. Lewis White Beck has famously suggested that, in this first sentence, Kant works with two conceptions of experience—one 'Lockean' (L-experience) and one 'Kantian' (K-experience): while L-experience is merely the "raw material of sensible impressions," K-experience is "knowledge of objects" or whatever "coincide[s] with the phenomenally real."[42] We hold, by contrast, that experience for Kant has a quite uniform meaning, one that, in fact, mirrors fairly closely Tetens's own account in the *Essays*. For Kant, too, experience is never a mere state of sensation but always involves a number of psychological components supplied by the understanding. What is more, for Kant experience always comes about in a number of stages very much akin to the ones distinguished in Tetens's Leibnizian-inspired account: beyond (i) mere sensation, experience presupposes (ii) representation and imagination, (iii) consciousness, apperception, and perception, and ultimately (iv) concepts and cognition.[43] Collectively, these different powers are responsible for "processing [*verarbeiten*] the raw material of sensible impressions" into experience—the first (albeit cumulative) result of the "activity of our understanding" being "set into motion," and the first instance of cognition that we attain (B1).[44]

To be sure, Kant's own solution to the problem as to how the insights of the Lockeans and the Leibnizians could be synthesized so as to make room for non-empirical cognition introduces further distinctions, ones that might only have been darkly glimpsed by Tetens, if he touched upon them at all. Most notably, perhaps, Tetens does not single out anything akin to Kant's *pure* forms of sensibility or perhaps even more importantly, Kant's account of *pure* consciousness (apperception). The latter point is particularly relevant insofar as pure consciousness promises to provide a specifically non-empirical means by which to apprehend the activity of the power of thinking itself (B157) as well as the concepts that have this power as their "birthplace" (B90). Nevertheless, even the

aforementioned points of overlap already testify to the significance of the fact that, as Johann Georg Hamann wrote to Herder in 1779, Kant had Tetens's *Essays* open on his desk continuously during the final years of preparing of the *Critique*.[45]

Notes

1 See Stiening and Thiel (2014) for an overview; cf. Beck (1969), Kuehn (1985, 1989).
2 In 1756 Lessing also published a translation of Hutcheson's *System of Moral Philosophy* (cf. Stiening and Thiel 2014: 14).
3 All translations of Tetens's works are our own. The *Versuche* are cited by pagination to the first volume, except for a few quotations from the second volume which are marked as 'PV II.'
4 See Thiel (2018: 61); cf. Beck (1969: 412).
5 Cf. Beck (1969: 412–25) and Allison (2015: 143–63).
6 For some helpful, if very brief, remarks on the reasons for resisting the common classification of Tetens as an empiricist, see Stiening and Thiel (2014: 21).
7 Indeed, as we will show below, Tetens actively took up Leibniz's own then-recently published (1765) critical engagement with Locke's views on the origins of concepts in the *Nouveaux Essais*. In fact, shortly after Tetens's *Essays*, a German translation of the first two books of Leibniz's *Essais* was published in 1778 by Johann Ulrich under the title *Neue Versuche über den menschlichen Verstand*.
8 See Tetens, PV I, 466 and Section 4 below.
9 Poleyen (1757: 77).
10 Poleyen (1757: 77).
11 Poleyen (1757: 77–78).
12 Poleyen (1757: 76).
13 Sulzer (1755: 30). In fact, Sulzer uses *Empfindung* indifferently to render both 'perception' and 'sensation.'
14 Sulzer (1755: 30).
15 Sulzer (1755: 28).
16 Sulzer (1755: 32).
17 Sulzer (1755: 29–32).
18 Wolff, PE § 25. Wolff notes his debt to Leibniz's terminology in this regard.
19 As Wolff puts it in his *Latin Logic*: "to experience [*experiri*] is to cognize something by attending to our perceptions [*quicquid ad perceptiones nostras attenti cognoscimus*]; that cognition itself which is given only through attention to our perceptions is called *experience* [*experientia*]" (LL § 664).
20 Once the perception is determined for thought, by the intellect, as to the "singular thing" that is responsible for bringing it about, it is called an 'idea.' Ideas are themselves eventually seen to "contain images and notions of what is universal in things" (LL § 52). For Wolff, then, cognition ranges over both the determination of the singular thing responsible for the perception qua change in the soul (the acquisition of an idea) and the determination of what is universal in the thing (the acquisition of a notion).
21 Baumgarten began adding German glosses on the Latin terms already in the 4th edition from 1757; we have chosen the 5th edition of 1763 to show the continuity with his near-contemporary *Acroasis logica*.

22 *Reflection* [*reflexio, Überlegung*] is classified by Baumgarten as a specific form of attention (M § 626).
23 This, in turn, is consonant with Georg Meier's complete German translation of Baumgarten's *Metaphysica* (1766) and his earlier short text on logic entitled *Auszug aus der Vernunftlehre* (1752).
24 Tetens, Essay 6; cf. PV I, 429ff.
25 Tetens provides evidence from Wolff's *Psychologia rationalis* (PR § 195) for the claim that Wolff implicitly concedes this very point, as the latter here introduces a further differentiation among representations, such that only those which "are related to their objects without requiring an intermediary inference" count as "immediately representing" objects, whereas others require "reasoning" to do so (cf. PV I, 10–11).
26 Tetens calls this power the *facultas percipiendi* (cf. PV I, 26) and considers it merely to consist in an initial '"taking up" (*per-cipere*) that does not imply any involvement of consciousness. We note this here to begin to head off a potential terminological confusion (see, e.g., Beck 1969: 422), given the now common practice of using 'perception' to translate *Wahrnehmung* (e.g., in the Cambridge edition of Kant's works). For both Tetens and Kant, however, the latter term refers to the distinct act of "taking up with awareness" (*Gewahrnehmen*), and so is something which does involve consciousness. On this, see Tolley (2016).
27 Tetens, PV I, 24, 115, 154–61.
28 Some of Tetens's attention to the level of mere impressions, prior even to representations (*perceptio*), is surely also motivated by his reading of the proto-physiological psychology developed by Bonnet, an author who receives by far the most of Tetens's attention in the Preface to the *Essays*.
29 Tetens considers this step to involve apperception (PV I, 97–98). His position implies that, along with Leibniz and others, Tetens accepts that there are representations (including sensations) in us "without consciousness" of them (PV I, 265). This lack of consciousness can obtain even of certain higher or more complicated acts of the imagination.
30 Tetens, PV I, 96, cf. 26, 273.
31 Tetens, PV I, 97–98, 295, 298.
32 To prevent misunderstanding: for Tetens, an experience is 'pure' not in Kant's sense, i.e., devoid of sensation (cf. B74), but rather in the sense of being unmixed with any higher acts of the soul. For this reason, perhaps 'mere experience' would be a better rendering.
33 Compare Kant's later remarks in the *Prolegomena* about the synthetic method of the first *Critique*, according to which the science carried out in this work "places before the eyes [*vor Augen stelle*] all of its articulations, as the structure of the elements [*Gliederbau*] of a quite peculiar faculty of cognition, in their natural connection" (4:263).
34 Later on, Tetens adds Lambert to the list of those who failed to successfully demonstrate, in response to Hume, that the relevant concepts aren't ultimately just "confused semblances of understanding [*Verstandesscheine*]" (ASP 83–84).
35 In fact, Tetens takes this intellectual content to be equally present in dreams as in "true thoughts," due to how "the power of thought processes sensations into representations of objects" (ASP 50). Compare Essay 4 for Tetens's rejection of Hume's claim that concepts such as cause and effect arise merely through "connection […] in the association of the power of imagination" (PV I, 312–16).

36 As Tetens understands it, what had gone under the name of ontology is actually the science of the most generic commonalities, which are represented through what Tetens calls "transcendent" concepts. Because these concepts are meant to be absolutely generic, ontology is not a theory about particular things or subsets of things but is rather "a general theory that in itself has no actual thing as an object." In this respect, it is like the "analysis of the mathematician" (ASP 18, cf. 39–40).

37 This partially anticipates Kant's later strategy in the so-called metaphysical deduction of the categories from acts of judgment by the understanding; on this, see Beck (1969: 420).

38 This sensitivity to the need for 'proof' of the 'reality' of ontological concepts partially anticipates Kant's transcendental deduction of the objective validity of the pure concepts of the understanding. See De Vleeschauwer (1934) and Allison (2015: 145).

39 Since, on Tetens's account, we can immediately become conscious of representations and learn to compare and distinguish them, observation does not rest on scientific investigations of, e.g., our "nerve fibers," which might also pertain to representations (PV I, 19).

40 Much later in the second volume of the *Essays* (Essay 13), we find further confirmation of the view that Tetens considers this higher-level or reflective cognition on the part of the philosopher to itself take place according to a series that parallels that of ordinary experience. Here Tetens describes this reflective process in a bit more detail. In general, he writes, "we cognize our sensing, our representing, our thinking, willing, and so on, insofar as we ourselves make ideas of these operations and compare and distinguish them by means of these ideas in the same way that we do so with the ideas of the effects and powers of physical things" (PV II, 152). The first step in forming these ideas is for us to have "elementary modifications" that our soul effects upon itself by its own acts; we then sense (*empfinden*) these modifications by means of what Tetens calls 'self-feeling' (*Selbst-Gefühl*) (PV II, 154). As was seen above, it is only when sufficiently "persisting traces" are left by sensations of these acts that we "take up representations of our soul's accomplishments" from them (PV II, 154). In turn, these representations serve as the basis for the comparison, abstraction, and generalization by means of which we form concepts (*Ideen*) of these very same acts—and are thereby able to cognize them (PV II, 152). Strikingly, Tetens here draws the proto-Kantian inference that, just as in the case of outer cognition of bodies, so too our cognition of the soul's acts is always mediated by sensations and representations of such acts, such that "our representations of the soul and its alterations […] are merely appearances [*Scheine*]" or "phenomena before us," rather than identical with the acts themselves (PV II, 152).

41 Caimi (2008: 49) claims that Tetens "considered that understanding and imagination are identical or, at least […] can be transformed into the other," and he sees this as an anticipation of Kant. This position seems hard to square with Tetens's rejection (noted above) of Bonnet and Condillac's commitment to just this kind of continuity. Moreover, we think that it misrepresents Kant's own view on the relation of the imagination and the understanding (compare Tolley 2019). The centrality of images and the imagination to Kant's account of perception is convincingly outlined in Matherne (2015); see Tracz (2020) for an account of the distinctive contribution to cognition made by images in Kant's theory of representation.

42 See Beck (1978: 40–41).

43 These parallels are perhaps most pronounced at the outset of Kant's 1781 account of the transcendental deduction, i.e., in his identification of "sense, imagination, and apperception" as the "sources (capacities or faculties of the soul), which contain the conditions of the possibility of all experience" (A94). Experience itself is highlighted in the 1787 edition as that with which "all our cognition begins" (B1). For a complementary description of the progression from sense to cognition, compare A320f/B376f, and for an analysis of the place of this progression within Kant's transcendental psychology, see Tolley (2017); see Watkins and Willaschek (2016) for additional discussion of Kant's account of cognition itself.

44 As we see it, this is the sense in which Kant claims that cognition "begins with" experience: it is the first instance of cognition in the developmental processing of the mind, not something that occurs prior to cognition. This interpretation also speaks against a neo-Kantian line of interpretation, according to which experience in Kant's work is a far more epistemically demanding mental state, one that is roughly equivalent to the knowledge of nature provided in an ideal science, with there being 'one' complete experience in which all veridical perceptions are connected together according to empirical laws. For instance, Nick Stang claims that in Kant's technical notion of the term, which he labels 'Strong Experience,' experience means "something stronger than just any perceptual episode with objective purport" (2012: 1130). See also Friedman (2001). According to Van Cleve (1999: 47), Kant did not make a consistent technical use of the term 'experience.' He proposes that Kant might have used the term 'experience' in as many as eight different senses. Beyond the overlap between Kant and Tetens's conception of experience itself, Kant also can be seen as adopting key elements of Tetens's methodology of 'observation' at several steps in his own system. For example, in his *Anthropology*, Kant claims that "[t]o observe [*beobachten*] the various acts of power of representation in myself, when I summon them, is indeed worth reflection; it is necessary and useful for logic and metaphysics" (7:133). The *Anthropology* itself embraces this methodology explicitly, noting that it depends on not just the "consciousness of oneself" but on the "observation of oneself [*das Beobachten seiner selbst*]" (7:127, 132).

45 Cf. Kuehn (1989: 366).

Bibliography

Primary Sources

Baumgarten, Alexander Gottlieb (1761), *Acroasis logica*, Halle: Hemmerde (AL).

——— (2013), *Metaphysics*, transl. and ed. by C.D. Fugate and J. Hymers, London: Bloomsbury / *Metaphysica*, Halle: Hemmerde 1739; 5th edn. 1763 (M).

Kant, Immanuel (1998), *Critique of Pure Reason,* transl. and ed. by P. Guyer and A.W. Wood, Cambridge: Cambridge University Press (CPR).

——— (2007) *Anthropology from a Pragmatic Point of View* (AA 7), in *Anthropology, History, and Education*, ed. by G. Zöller and R.B. Louden, transl. by R.B. Louden, Cambridge: Cambridge University Press (Anthr).

Locke, John (1975), *An Essay Concerning Human Understanding*, ed. by P.H. Nidditch, Oxford: Clarendon (*Essay*).

Poleyen, Heinrich Engelhard (1757), *Herrn Johann Lockens Versuch vom menschlichen Verstande*, Altenburg: Richter.
Sulzer, Johann G. (1755), *Philosophische Versuche über die menschliche Erkenntnis von David Hume*, Hamburg: Grund und Holle.
Tetens, Johann Nicolas (1775), *Über die allgemeine speculativische Philosophie*, Bützow/Wismar: Berger & Boedner; repr. in *Neudrucke seltener philosophischer Werke*, vol. 4, ed. by W. Uebele, Berlin: Reuther and Richard, 1913 (ASP).
——— (1777), *Philosophische Versuche über die menschliche Natur und ihre Entwickelung*, Leipzig: Weidmann (PV).
Wolff, Christian (1728), *Philosophia rationalis sive Logica*, Frankfurt/Leipzig: Renger (LL).
——— (1732), *Psychologia empirica*, Frankfurt/Leipzig: Renger (PE).
——— (1734), *Psychologia rationalis*, Frankfurt/Leipzig: Renger (PR).

Secondary Sources

Allison, Henry (2015), *Kant's Transcendental Deduction*, Oxford: Oxford University Press.
Ameriks, Karl (1990), 'Kant, Fichte, and Short Arguments for Idealism', *Archiv für Geschichte der Philosophie*, 72/1, 63–85.
Beck, Lewis White (1969), *Early German Philosophy*, Cambridge: Harvard University Press.
——— (1978), 'Did the Sage of Königsberg have no Dreams?', *Essays on Kant and Hume*, New Haven: Yale University Press.
Caimi, Mario (2008), 'Comments on the Conception of Imagination in the *Critique of Pure Reason*', in V. Rohden, R. Terra, G. de Almeida, and M. Ruffing (eds.), *Akten des X. Internationalen Kant-Kongresses*, vol. 1, Berlin: De Gruyter, 39–50.
De Vleeschauwer, Herman J. (1934), *La déduction transcendantale dans l'œuvre de Kant*, vol. 1, Antwerp: De Sikkel.
Friedman, Michael (2001), 'Kant on Science and Experience', in V. Gerhardt, R.-P. Horstmann, and R. Schumacher (eds.), *Kant und die Berliner Aufklärung, Akten des IX. Internationalen Kant-Kongresses*, Berlin: De Gruyter, 233–45.
Kuehn, Manfred (1985), *Scottish Common-Sense in Germany: 1768–1800*, Queens: McGill University Press.
——— (1989), 'Hume and Tetens, *Hume Studies*, 15/2, 365–76.
Matherne, Samantha (2015), 'Images and Kant's Theory of Perception', *Ergo*, 2/29, 737–77.
Paton, Herbert J. (1936), *Kant's Metaphysic of Experience*, London: George Allen & Unwin.
Stang, Nicholas (2012), 'Kant on Complete Determination and Infinite Judgement', *British Journal for the History of Philosophy*, 20/6, 1117–39.
Stiening, Gideon and Thiel, Udo (eds.) (2014), *Johann Nikolaus Tetens (1736–1807). Philosophie in der Tradition des europäischen Empirismus*, Berlin/Boston: De Gruyter.
Thiel, Udo (2018), 'Kant and Tetens on the Unity of the Self', in C. Dyck and F. Wunderlich (eds.), *Kant and his German Contemporaries*, vol. 1, Cambridge: Cambridge University Press, 59–75.

Tolley, Clinton (2016), 'From "Perception" to Understanding, from Leibniz to Kant', *Estudos Kantianos*, 4/2, 71–98.

——— (2017), 'Kant on the Place of Cognition in the Progression of our Representations', *Synthese*, 197, 3215–44.

——— (2019), 'Kant on the Role of the Imagination (and Images) in the Transition from Intuition to Experience', in G. Gentry and K. Pollok (eds.), *The Imagination in German Idealism and Romanticism*, Cambridge: Cambridge University Press, 27–47.

Tracz, R. Brian (2020), 'Imagination and the Distinction between Image and Intuition in Kant', *Ergo*, 6/38, 1087–120.

Van Cleve, James (1999), *Problems from Kant*, Oxford: Oxford University Press.

Watkins, Eric and Willaschek, Marcus (2016), 'Kant's Account of Cognition', *Journal of the History of Philosophy*, 55/1, 83–112.