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KANT'S SENSATIONISM\*

I

My object is to show that Kant's theoretical philosophy is a complex extension of sensationism, and that several exegetical conundrums can be resolved by making that assumption.

This claim needs some initial elaboration since, for one thing, virtually all commentaries link Kant only with Empiricism and Rationalism, the "two active schools",<sup>1</sup> and also because the accepted morphology of eighteenth century philosophy takes no account of the salient contribution of sensationism. The term is often applied only to a small group of French philosophers who are thought to represent a minor offshoot of Empiricism, and an epistemological dead end.

It seems that Malebranche was the first to hold that external impingements upon the senses must initially result in sensations, merely subjective modifications of the mind.<sup>2</sup> The important insight here is not that all knowledge of external things begins with sensory awareness – many others held this view – and that some elaboration of the sensory input by central functions of the mind is needed before one can properly speak of knowledge or perception. It was, rather, that the mental states initially induced are *non-intentional* or *non-referential*.

Some caution riders must be placed on the term 'intentional'. I am not using it here quite in the sense of Brentano, who would have considered the presence of a sensation an intentional act, the sensation being the object of that act.<sup>3</sup> In this sense, everything of which one is aware is an object. In Kant's words: "Everything, every representation even of which one is conscious may be called object"<sup>4</sup> I wish nevertheless to speak of sensations as non-intentional since they do not *have* objects, even if they *are* (in a sense) objects. It was common to think that reference to things (other than one's own states) required some sort of mental token or symbol "by means of" which the object is thought,<sup>5</sup> analogous to the way in which one refers to things by using words. Kant, accordingly, goes on to say that

he is not concerned so much with representations insofar as they *are* objects, but only “insofar as they designate an object.”<sup>6</sup> Sensations, in this view, were not thought suited to designate anything. This is why I call them non-intentional.

This, then, is the central thesis of sensationism: that there are non-intentional mental states in which no object, other than the state itself, is present to the mind, and that they are the foundations of empirical knowledge. Some writers, notably Condillac, preferred to describe all such states in the manner of bodily sensations. In order to avoid reference to an object, he would allow “I am green” to describe a visual analogue to such statements as “I am cold”. I will return to this point later.

The sensationist supposition demands an account of the mechanisms that engender reference to objects, a task that we should now call constructivist; it differs markedly from the criteriological concerns that had dominated epistemology earlier on. The problem is no longer to discover a criterion that allows us to sort out ideas that truly represent external objects from those that merely appear to. It is, rather, to explain the very roots of reference, regardless of whether the object before the mind is real or merely virtual or illusory, or some conceptual object. Kant’s description of the problem is this: “How does it come about that we posit an object for these representations, or attach to them, beyond their subjective reality as representations, an objective reality?”<sup>7</sup>

Sensationism so understood forms a major departure both from the empirical and the rationalist traditions. It is, in fact, a fundamental tenet of several philosophers who are generally grouped with widely divergent schools or movements, among them Condillac, Reid and the Scottish school, Tetens, Fichte, Schopenhauer, W. V. Humboldt, Hamilton and, as I hope to show, Kant.

## II

In his great commentary Vaihinger writes that “Kant ignored his ‘half-baked’ contemporaries with the pride that is an attribute of any genius, and treated the whole issue as a matter that had to be joined . . . between him and the two great men (Leibniz and Hume).”<sup>8</sup>

This is a badly skewed picture. It ignores what is, in effect, a paradigm shift that resulted from the recognition of sensations and

their nonintentional character. While Kant addresses himself to several major problems raised by Leibniz and Hume, he does so on a wholly new understanding of mental phenomena, an understanding that was in fact prepared by his lesser known predecessors and contemporaries, and that neither Leibniz and his successors, nor the Empiricists shared. It is well, therefore, to contrast sensationism with the other schools that were then active.

Leibniz' thesis that the soul mirrors the entire universe is familiar. Less well appreciated is the fact that he also subscribed to its converse, that is, that everything in the soul mirrors something in the universe: "The nature of the monad is to represent."<sup>9</sup> In the *Principles of Nature and of Grace* he claims that all internal states of monads are perceptions.<sup>10</sup> Christian Wolff and his orthodox successors made the point with a clarity that leaves nothing to be desired:

We meet in the soul nothing but the ability (*Kraft*) to represent the world . . . hence all changes that are noticeable in the soul are due only to various limitations of this ability . . .<sup>11</sup>

His widely read student Gottsched put the matter as follows:

The soul represents inwardly those bodies which affect its sensory organs . . . But the things which affect our senses are all bodies, and these in turn are parts of the world. Hence the soul in all its states represents the world . . . Since we know for certain . . . that the soul . . . has the ability to represent, and since, being a simple thing, it cannot have more than one power, it must be possible to explain all other occurrences in the soul on the basis of this power.<sup>12</sup>

Leibniz' successors evidently thought that the referential relation could be reduced to a subrelation of causality (or rather its converse), and maintained that all mental states are caused by "parts of the world", which they then represent. It is a consequence of this view that absolutely every mental state is a representation of something. Thus "representation" (*Vorstellung*) became the most general term denoting mental occurrences. Kant continued to use the term with the same generality; but since he no longer held that every mental state has an object, we find that he speaks, incongruously, of representations that do not represent.<sup>13</sup>

Leibniz' view has several troublesome consequences, for instance that all people are deeply deceived about most of the objects of their thought, that one does not usually know what one is really thinking about. I shall not pursue this matter beyond mentioning that Reid

made very nearly this point when he remarked against Leibniz that "no man can perceive an object without being conscious that he perceives it."<sup>14</sup> Reid does not deny unconscious mental states, but the possibility of inadvertent reference.

The main point of criticism against Leibniz' thesis was that it did not allow for mental states that represent nothing.

Wolff's astute critic Crusius took delight in making just this point:

The excuses which are made in this connection are very poor. For example, it is said that a pain corresponds to (i.e. represents) an injury to the solid parts of the body. But the *representation* of the injury already corresponds to it. What then corresponds to the pain, of which we are clearly aware that it is something altogether different?<sup>15</sup>

The answer is, of course: Nothing at all. J. N. Tetens, whose book was "always before" Kant when he wrote the *Critique of Pure Reason*<sup>16</sup> remarked that on Wolff's view

Joy, hunger, longing, fear, and all emotions and desires and passions are representations, just like the ideas of the sun, of a horse, of a man."

He goes on to wonder what is gained if "the formation or representations is seen as basic to all forms of mental activity."<sup>17</sup>

Kant took the same line. He criticized Leibniz as follows:

Leibniz takes all sensations (deriving from) certain objects for cognitions of them. But beings who are not the cause of the object through their representations must in the first instance be affected in a certain way so that they can arrive at a cognition of the object's presence. Hence sensation must be the condition of outer representation but not identical with it . . . Hence cognition is objective, sensation subjective.<sup>18</sup>

It is beyond question not only that Kant recognized non-intentional states, but that he did so in conscious opposition to Leibniz and the Wolffian school.

The term 'idea', as it occurs in British Empiricism, is notoriously ambiguous. It is, however, always construed as meaning an *object* before the mind. Ideas are what the mind "is applied about whilst thinking."<sup>19</sup> For Berkeley, they are simply the "objects of human knowledge"<sup>20</sup> In like vein, Hume takes the sentences "an object appears to the sense" and "an impression becomes present to the mind" to be equivalent,<sup>21</sup> and if to have an impression is to have an object present, the same must *a fortiori* also hold of ideas. Since anything that may occur in a mind is an idea or (in Hume) an impression, it follows that any mental occurrence is to be described as the presence of an object to the mind.

Niceties aside, one may say that *perceptual* situations are taken as paradigmatic for all mental occurrences. Disanalogies are neglected, with occasionally astonishing consequences. For example, Hume took passions to be impressions, and not merely to be evident through impressions.<sup>22</sup> It must thus be the case, if we give his stipulations their due weight, that to be in the throes of a passion is to have an object before one's mind. For Berkeley, to be in pain and to have an idea of (that?) pain are one and the same thing. He makes an important argument turn on that contention.<sup>23</sup> Given his views on ideas of imagination it follows that remembered pains are just like the pains remembered only, presumably, weaker and excitable at will.<sup>24</sup> Many other strange consequences could be listed.

The consuming problem of British Empiricism was thus not how the mind can come to have objects at all, since for the mind to be active at all is for it to have ideas, i.e. objects of a sort, before it. Rather, the problem is that of *external* and not, if I may so put it, of internal reference or intentionality as such. Under what conditions, it is asked, is having an idea the same as perceiving an external object? The answer is that the ideas "through" which we perceive external objects are *just like* ideas that fail to represent: "To form an idea of an object and to form an idea simply is the same thing; the reference of the idea to an object being an extraneous denomination, of which in itself it bears no mark or character".<sup>25</sup> Whether or not an idea actually represents depends, in the view of Berkeley and Hume at any rate, on the nature of the train in which it is embedded, or on its genealogy. But these considerations address themselves to a problem, which, though real enough, can be resolved only after it is explained how such an intentional state as having an idea before one's mind, as opposed to merely having a sensation, are possible in the first place. I take it, then, that in the Lockean tradition it was assumed that a conscious mind is inevitably "applied about" some object, indeed, that to be conscious is to be so applied, and that sensationism differed significantly from this view.

It has been claimed, sometimes in terms of approbation ("staunchly committed") that Kant's Königsberg was a kind of Aristotelian backwater. If only for this reason it is worth noting that in Aristotle, as also, presumably, in the tradition coming from him, consciousness must always be consciousness of an object. (I have shown elsewhere that Brentano took the inspiration for his famous thesis from this

source.)<sup>26</sup> In *De Anima* the problem is raised how we perceive *that* we see.<sup>27</sup> Apparently, the answer is that we perceive by sight not only the object, but also that we see. The solution is arrived at by an awkward *reductio* argument, but the problem is again taken up in *Metaphysics* XII, 9, where Aristotle says that “knowledge and perception and opinion and understanding have always something else as their object, and themselves only by the way (*en parergo*).<sup>28</sup> The point is, plainly, that there is no state of consciousness that does not involve some object. The mind cannot perceive itself if it does not perceive some other thing, and this seems to follow from familiar Aristotelian doctrine: the mind is in actuality *nothing* other than the object which it thinks. While the mind is in a way (i.e. potentially) all existing things, it is in actuality only what it actually thinks. But a mind devoid of actuality cannot be known to itself. Hence no state of mind can be known to us if there is no existent object. To say this is to say that all conscious mental occurrences are intentional.

### III

Malebranche’s suggestion that sensations are as such merely affections of the mind, and that reference to objects is achieved only through certain functions of the understanding, such as compounding and judging,<sup>29</sup> was developed and refined in Condillac’s *Traité des Sensations*, the fountainhead of sensationism. Condillac introduces, as a heuristic fiction, a statue with a functioning mind encased inside impermeable marble, and stipulates that sensory pathways be opened one at a time, beginning with the sense of smell. What would the statue experience if it could only smell, and how would we describe its experience? “If we give the statue a rose to smell,” he says, “to us it is a statue smelling a rose, to itself it is smell of a rose.”

The statue therefore will be rose smell, dianthus smell, jasmine smell, violet smell, according to the flower which stimulates its sense organ. In a word, in regard to itself smells are its modifications or modes. It cannot suppose itself to be anything else, since it is only susceptible to sensations.<sup>30</sup>

He reasons that if the statue had only the sense of smell it could not contrive to perceive an *object* of any sort, but would be bound to describe all of its states as modifications of itself, even if it were gifted with memory and the ability to compare, and induce over, its various olfactory states. An account of its past states would in every

case be only a history of itself, and of nothing else. It would not even be a history of the smells it had experienced, but only a history of what it itself had been.

The form of words used to describe the statue's states deserves comment. Plainly, Condillac takes some pain to avoid direct object constructions such as "to be aware of", "to experience", and "to be subject to". He seems to have thought that these more common locutions might mislead by suggesting that even under the restricted conditions described, certain objects, that is, smells, are present to the mind. Instead, he chooses forms of expression used for bodily sensations: "I am cold", "I am fatigued", "I am pained", and so forth. He wants to convey, obviously, that there is no object present apart from, or in addition to, the state of the perceiver. Reid makes the related point that in a sensation no object is present separate from the "act":

Sensation is a name given by philosophers to an act of mind which may be distinguished from all others by this, that it hath no object distinct from the act itself . . . When I am pained, I cannot say that the pain I feel is one thing, and that my feeling it, is another thing.<sup>31</sup>

Condillac, Reid, and also Kant held that if one is aware of a sensation, one is aware of something, but that one is not, in such a case, aware of anything *other* than one's act or state. They would, in any case, have thought it misleading to speak of sensory states as objects, even in the attenuated sense in which others took ideas to be objects before the mind.

Condillac continues his thought experiment by considering, in succession, the sense of hearing, smell, and sight. If we grant his point about fragrances, we will have no scruples about tastes or even sounds. But things are more interesting and problematic with the sense of sight. For one thing, it is by no means obvious that there *are* sensations of sight in the given sense. Is it not the case that we always see *objects*, even if the objects are not always physical things? Can there be sensations of sight that are *only* modifications of the self, not involving objects of any sort? And, if there are such sensations, what are they? Condillac identified the sensations of sight with light and colours, so that the statue would report its primitive visual states as "I am green" or "I am red": "Our statue sees only light and colours, and is unable to judge that there is anything outside itself."<sup>32</sup> He

obviously takes sensations of sight to be sufficiently like bodily sensations to be reported in the same manner.

This identification of visual sensations with colour requires some comment. It must be noted that Condillac denied explicitly that there are sensations of shape. This was not an uncommon view to take. Burke, for example, points out that according to some contemporary theories of vision "... there is but one point of any object painted on the eye in such a manner as to be perceived at once; but by moving the eye, we gather up with great celerity, the several parts of the object, so as to form one uniform piece."<sup>33</sup> Evidently Condillac held roughly this view, according to which the initial impingement upon the sense did not result in the perception of a shape, but that a shape we perceive results from a "gathering up and holding together", as Kant later put it, of the given elements. On this view, a visual image is not like a still picture in the mind, but a series of sensations which is interpreted in a certain way. To say that a visual image is present is to report on a piece of mental history which covers a certain brief span of time. Also, the image is not the end-product of that process of scanning: we are not to think of the mind as literally gathering up visual bits which constitute the image when we have them all together. Rather, to have an image is to have gone through a certain sequence of sensory affections and to have judged that they constitute one object:

The eye... cannot grasp the whole of the simplest shape... until it has noticed successively all its parts. It must make a judgment on each part, and another judgment on the whole of them together. It must say: here is one side, here a second and here a third; here, then, is a space bounded by three sides, and from this results this triangle.<sup>34</sup>

What is required, then, to see even a simple shape is not only the presence of certain sensations, but also the recollection that sensations had been present, and the judgment that these sensations are aspects of one object: The mind undergoes a series of colour modifications which are recollected and judged to form features of an object. This process was sometimes called "assigning the sensations to an object as its properties".

But there are some obvious further problems having to do with shape: There is no indication that Condillac assumed "topogenic" sensations, that is, modifications of the self which guide the spatial disposition of the colour sensations. Other sensationists, for example Reid and Lotze, supposed that such sensations exist. Lotze called



them "local signs" and associated them with the kinesthetic sensations of eye movement. Reid simply assumed that there had to be some sort of topogenic cues (they cannot, of course, be shapes but must be attributes of the mind), but he took them to be wholly inaccessible to consciousness because "they carry the thought to the external object, and immediately disappear and are forgot. Nature intended them only as signs; and when they have served that purpose they vanish".<sup>35</sup>

But topogenic sensations are an embarrassment. Sensationists were not generally committed to the view that sensations are the basis of knowledge in the sense that they are indubitable or incorrigible; they were thought to be fundamental only in the sense that they are the *initial* products of external influences. This allowed for the view that some sensations are elusive, difficult to detect, or apparent only after considerable practice and introspective training. Reid does not tire to make this point, and Kant, too, remarked that we cannot distinguish the "raw material" of cognition from the additions made by the faculty of knowledge "until with long practice we have become skilled in separating it".<sup>36</sup> This allows some latitude for speculation on the actual character of sensations so that, in visual perception for instance, colours, but not shapes are said to be sensational. Nonetheless, topogenic sensations are exceptionally elusive. Not even long practice can make us aware of their presence. We know them only by their effects. They are hypothetical constructs meant to explain how the perception of shape is possible, given that the original input is merely sensational. Evidently, local signs and the like are purely *ad hoc* devices to explain the perception of visual shapes, given the sensationist premiss, and some sensationists, Condillac and Kant among them, did not follow that route.

Condillac supposed, rather, that the eye is trained by the sense of touch to follow contours: "The eyes only come to see a shape distinctly, because the hand teaches them to grasp it as a whole."<sup>37</sup> The privileged position of touch is not explained. It is merely assumed that it is the foundation of the synthesis of visual shapes and extension: "Touch teaches the eyes to spread colour over the whole of nature".<sup>38</sup> He does not, however, suppose that touch is more reliable than the other senses by putting us in direct contact with external things themselves; it is not privileged in the sense in which Berkeley describes it in the *New Theory of Vision*. According to

Condillac, "touch is no more credible than the other senses: Since we do not recognize that sounds, tastes, odours, and colours do not exist in objects, it must be equally true that extension does not exist in them either." He continues in a footnote:

I do not say that there is no extension, I only say that we can only perceive it in our own sensations, whence it follows that we do not see objects in themselves. Perhaps they are extended, and even tasty, sonorous, coloured, odoriferous. Perhaps they are nothing of the kind . . . Suppose that there is no extension; this would be no reason for denying the existence of objects. All that we could reasonably infer would be that objects are existences which occasion sensations in us, and that they have properties about which we have no certain knowledge.<sup>39</sup>

The sensations of touch, then, do not tell us what objects really are like. Rather, touch is a necessary condition for reference. Without it there would be no objects for us. All other sensations gain objective significance by being related to the sense of touch; they are 'of' objects that are constructed by the senses of touch and sight.

We can learn much about Kant's theoretical philosophy by studying Condillac's sensationism. Both philosophers were puzzled by the same question: "How do we contract the habit", asks Condillac,

of relating our sensations to outside things. Indeed, it appears very surprising that senses which only experience what is within themselves, and which have no means of suspecting a space outside themselves, can yet relate sensations to objects which occasion them. How is sensation able to extend beyond the organ which experiences and limits it?<sup>40</sup>

There are several interesting suggestions in this paragraph, viz., that we relate sensations to things outside by virtue of a habit, that the objects to which the sensations are related are also their causes – a point by no means obvious and not maintained by Kant in this way<sup>41</sup> – and, most importantly, the question is put how it is possible that objects are perceived at all, if the senses only deliver objectless sensations. I have briefly touched upon Condillac's proposed solutions, namely, that the sense of touch, by offering resistance to our movements, calls attention to objects other than ourselves, and that the other senses give us perceptions of objects to the extent in which they are related to touch.

#### IV

It is not difficult to show that Kant was sensationist in the sense I have stipulated. He introduces the concept of a sensation

(*Empfindung*) at the beginning of the *Transcendental Aesthetic*: "The effect of an object upon the faculty of representation, so far as we are affected by it, is sensation".<sup>42</sup> The rider "so far as we are affected by it" is crucial. It is to convey that if merely a sensation is present in the mind, *no* object is represented. A sensation, he says elsewhere, "is not in itself an objective representation"<sup>43</sup>, it is a "merely subjective representation, of which one can only be conscious that the subject is affected".<sup>44</sup> In A 320, B376/377, in the course of a polemic against the misuse of the term "idea" he develops a classification of terms denoting mental occurrences. "Sensation" is here defined as a conscious representation "which relates solely to the subject as the modification of its state." Sensations are contrasted with cognitions (*Erkenntnisse*), which are representations *with* objects, and of which there are two types, viz. intuitions and concepts.

We have seen that this understanding of the term "sensation" was then reasonably well entrenched and would not have struck an informed reader as in the least odd. It was not a specifically Kantian term, but reflected the state of the art in philosophy of mind and perception. Nor are his examples of sensations out of keeping with what one finds elsewhere: Taste of a wine, colour;<sup>45</sup> sound, warmth;<sup>46</sup> red colour, weight;<sup>47</sup> red, black, sweet, hard, warm.<sup>48</sup> In his lectures he often uses the example of pain, and mentions the shudder one feels in reading certain portions of Haller's poem about eternity.<sup>49</sup>

Kant held that sensations are merely subjective<sup>50</sup> and, indeed, incommunicable: "Since sensation cannot be communicated (either through understanding or through participation . . . sensation does not allow of any touchstone; concerning sensation everyone is right before himself".<sup>51</sup> "Concerning colour, everyone may have his own type of sensation".<sup>52</sup> But although sensations themselves are not communicable, the relations between them are: "In the relation between sensations lies something that is generally valid, even though each sensation has only private validity".<sup>53</sup> It is of some interest to note that certain modern philosophers of a positivist bent had the very same view on the problem of privacy:

Even though the material of the individual streams of experience is completely different, or rather altogether incomparable, since it is absurd to compare the sensations or feelings of different subjects as far as their immediately given qualities are concerned, nonetheless certain *structural properties* are analogous for all streams of consciousness.<sup>54</sup>

In keeping with the tradition Kant also maintained that sensations are sense-specific, that is, no sensation properly so called can come to us through more than one sense; they are *proper* sensibles rather than *common* sensibles: "The sense of man contains something that has private validity, and something that has common validity. What is common to our senses also conforms to that of other persons . . .".<sup>55</sup> It would seem to follow that the common sensibles, which no sensationist would have called sensations, are the intersubjective, structural element in perception. This holds, in particular, of shapes and any sort of spatial dispositions.

It did not escape commentators that Kant took sensations, including visual sensations, to be unextended, and, indeed, not to have spatial attributes of any kind.<sup>56</sup> The point is made in the *Anticipations of Perception*:

Apprehension by means of sensation occupies only an instant, if, that is, I do not take into account the succession of different sensations. Since sensation is that in an appearance which does not involve a successive synthesis proceeding from parts to the whole representation, it has no extensive magnitude.<sup>57</sup>

It is evident that Kant took the spatial and extended nature of objects to be the result of an interpretation placed upon certain sequences of sensations, which are themselves without extension. Kant sometimes calls this the activity of "making pictures from impressions",<sup>58</sup> and sometimes "genetic apprehension",<sup>59</sup> or "figurative synthesis".<sup>60</sup> In his lectures he employs a realistic mode of expression, as if the observer were simply scanning an object in the manner of a television camera:

My mind is always engaged in forming itself a picture of the manifold by running through it. For example, when I see a city, my mind forms a picture of the object before it by running through the manifold . . . This depicting capacity is the formative (*bildende*) capacity of intuition . . .<sup>61</sup>

This manner of putting it suggests that the object that causes the sensations is itself spread out in space, and that its spatial features are *discovered* by scanning it with the eye. The sensationist premiss, however, does not allow this assumption. Initially only the succession of sensation is present, and we may speak of a *generation* of the spatial features of objects by putting the sensations in relation to each other, setting them "outside and alongside each other, and referring them to something outside me" as Kant puts it at the beginning of the *Transcendental Aesthetic*.<sup>62</sup> The aggregation and coordination of sensory impressions produce *objects*, reference: "in coordination is the *respectus* of extraposition".<sup>63</sup> Through these synthetic activities in-

tutions are generated. Intuitions, in Kant's terminology, are singular referring entities. Each of them is compounded from sensations which are the "material element" or the "manifold" in that intuition.

None of this goes much beyond what Condillac and others had already maintained. It shows, however, that Kant did subscribe to the central tenets of sensationism. I will now begin to discuss several major themes of the *Critique of Pure Reason* in their relation to these sensationist assumptions.

## v

The section now commonly called 'Metaphysical Deduction'<sup>64</sup> has received a bad press on the grounds that its reasoning is capricious, and that Kant has in no way demonstrated a connection between judgments and categories. Kemp Smith denied that there is "identity or even analogy" between the functions exercised in judgment and the categories,<sup>65</sup> and R. P. Wolff thinks that Kant is "arbitrary in the extreme. The appearance from nowhere of the table of judgments and the rather flimsy argument of the table of categories are entirely unconvincing."<sup>66</sup> I do not believe that Kant's point has been well understood. We will see in the end that Kant makes certain assumptions that are probably false, if tempting, but we will find that the charges of capriciousness or even flummery are not founded.

Our understanding of this section is greatly impaired by a certain misunderstanding concerning the work "*Erkenntnis*" and its cognates. Since the eighteenth century this word has migrated from the semantic field of reference to that of insight: "*erkennen*" used to mean, roughly, "to discern, make out, detect, perceive", or more generally, "to have before one's mind as an object", rather than "to know, ascertain, understand". There is evidence for this in Kant's own definition<sup>67</sup> where *Erkenntnis* is a mental occurrence that has an object, and is the generic term of which intuition and concept are the species. Adelung's *Wörterbuch* bears this out,<sup>68</sup> as does Wolff's usage. Leibniz had already suggested that "*Kenntnis*" be used as the German rendition of *terminus simplex*.<sup>69</sup> On the view then current, this has to be a component of a judgment, a mental occurrence that makes reference to an object or objects. A term can only refer; it is a vehicle of reference, not knowledge. Plainly, *Erkenntnis* demands to be translated, in very many cases, simply as "reference", rather than as "knowledge". Consider, for example, Kemp Smith's translation of a passage of the Transcendental Deduction in the first edition:

It is only when we have thus produced synthetic unity in the manifold of intuition that we are in a position to say that we know (*erkennen*) the object.<sup>70</sup>

There are two mistakes in this. First, the definite article before “*Anschauung*” is omitted, as is Kemp Smith’s wont, so that the passage suggests a mysterious mass, the “manifold of intuition”, when Kant merely wants to indicate the set of sensations that make up a *particular* intuition. More importantly, Kant does not want to say that under the described conditions we *know* the object, but that only under these conditions do we *have* an object. The correct translation is this:

It is only when we have thus produced synthetic unity in the manifold of an intuition that we are in the position to say that we make reference to an object.

Similar corrections in the Metaphysical Deduction have startling results. It is worth quoting the corrected version at some length; using “referring thought” as the rendition of “*Erkenntnis*”:

By synthesis, in its most general sense, I understand the act of putting different representations together, and to unite them into one referring thought . . . Synthesis of a manifold . . . is what first gives rise to reference . . . The synthesis is that which actually gathers the elements for referring thoughts and unites them to form a certain content. It is to synthesis, therefore, that we must first direct our attention, if we would determine the first origin of reference. (actually: unserer *Erkenntnis*, i.e., “the reference we make (to objects)”).

Synthesis in general, as we shall hereafter see, is the mere result of the power of imagination, a blind but indispensable function of the soul, without which there would be no reference to anything, but of which we are scarcely ever conscious. To bring this synthesis to *concepts* is a function which belongs to the understanding, and it is this function of the understanding that first provides us with reference properly so called.<sup>71</sup>

What Kant wants to explain, then, is not the origin of knowledge, but of reference, that is, of objects to us. Only if this is properly understood can we appreciate how important and extraordinary a claim Kant makes when he says that there can be no *Erkenntnis* without judgment. The clearest statement of this point occurs in the long footnote in the *Metaphysical Principles of Science* in which he glosses the Metaphysical and Transcendental Deductions: “A judgment,” he says there, “is the act through which alone given representations become entities that refer to objects”.<sup>72</sup>

This differs importantly from the classical treatment of logical subject matter that originated with Aristotle’s *Organon*, where the doctrine of terms and their reference is concluded before the next

topic, judgments, is taken up and where judgments are construed as concatenations of already articulated and fully constituted terms. Kant suggests, to the contrary, that terms make reference to their objects, that is, become *Erkenntnisse*, only within the context of judgments. On his view I could not think of Caesar without thinking something about him. I could not just think CAESAR (though I might mouth the word to myself, hardly a case of reference to the man). It is worth noting that Kant was not alone in this renegade view. Frege, for example, held that "one must always have in mind a complete sentence. Only within it have words properly speaking a meaning" (*eigentlich eine Bedeutung*).<sup>73</sup> Wittgenstein maintained that "A name has meaning (*Bedeutung*) only in the context of a sentence"<sup>74</sup> and even Quine could be thought to have said virtually the same thing: "We may take full statements as our significant units".<sup>75</sup> On this point Kant seems to differ from these later philosophers merely by casting his assertion in a mentalistic idiom.

In the *Critique of Pure Reason* Kant puts the same point more colourfully in his famous "Intuitions without concepts are blind".<sup>76</sup> Plainly, this is meant to say that intuitions do not refer to objects, indeed they are not properly speaking intuitions, if they are not combined with concepts, and this can occur only in the context of a judgment: "Only if they (the understanding and the senses, i.e. intuitions and concepts) are united can reference result."<sup>77</sup>

It may strike one as odd that whereas we started by investigating sensationism as a theory of perception, we are now considering judgments and the reference terms of judgments have to their objects. One may wish to insist that the mental event that occurs when one sees a house is *not* the term of a judgment, and that even though one can say that, both in judging that Caesar is mortal, and in looking at a house, an object is before the mind, the two cases are *toto coelo* different, and that nothing that can be said about the one will shed the least bit of light upon the problems of the other. This matter bears some thought.

Without doubt, Kant's argument is helped along by the then common conflation of perceptual and semantic reference. One can show this by considering his notion of an intuition.

In Kant's earliest writings neither the German "*Anschauung*" nor the Latin "*intuitus*" can be found. "*Anschauung*" is first introduced to replace the expression "*conceptus singularis*" singular term, and is

used in this sense in his logic lectures, as well as in the published *Logic*. The following examples of intuitions are given: "Caesar", "Socrates", "Bucephalus", "Rome", "The Earth", "The Sun",<sup>78</sup> as well as, in the *Critique*, "Space" and "Time". Plainly, in most of these examples Kant cannot have had perceptual situations in mind. "Intuition" here plainly means the same as "singular term", in keeping with the definition which says that an intuition is a representation with just one object.<sup>79</sup> Accordingly, the proof that space is an intuition is conducted by showing that there is only one space.<sup>80</sup> Intuitions so understood will occur as the subjects of singular judgments; they are the mental counterparts of certain grammatical entities, viz. proper names.<sup>81</sup> The thesis that *they* do not refer to anything unless they are embedded in a judgment is arguable and interesting. But this thesis is strikingly unconvincing when we take "intuition" in the other sense to which Kant puts it.

When Kant speaks of the intuition of a house<sup>82</sup> there is no question but that he has in mind a person who is *looking* at a house. On one occasion he even seems to define empirical intuition as a kind of perception.<sup>83</sup> Kant plainly does not distinguish perceptual and semantic reference: we tend to think of such mental ONGOINGS as seeing a house as vastly different from making some sort of judgment about Caesar. Kant thought of them as very much alike.

We must, I think, assume that he took the perceptual process as paradigmatic. We have seen that for Condillac the process of perceiving an object has as its final stage a judgment that pulls together all the sensational bits. Kant follows him in this: the recognition of an object in a concept, that is the application of a concept to an intuition is an integral and indispensable part of the perceptual process, and, indeed, is constitutive of the intuition. There would *be* no intuition, and hence no object, nothing would be perceived, if no concept were applied. Now it seems to me that Kant thought a judgment about an absent thing to be very much like the perception of a present thing, except that in this case the sensational elements are supplied by the imagination, the vicar of the senses, the "faculty of representing in an intuition an object *that is not itself present*".<sup>84</sup>

I shall not address the question whether there is some deep connection between semantic and perceptual reference that Kant had discovered – I find no argument for this. I merely wish to insist that his argument absolutely depends on the identification of the two



relations, for it is meant to lead to the conclusion that there would be *no objects at all* for us, if we did not make judgments. The progress, then, from sensations or their surrogates to referring or intentional thought is, in every case, dependent on judgments.

Kant's next step is to claim – this certainly is an inspired assumption, though there is no proof for it – that since judgments are constitutive of reference, and hence of objects, the types of judgments used must leave their marks on the objects so constituted, and if there are basic and mutually irreducible types of judgments, then they will divide things into basic and irreducible types: the categories of being. The point is made in section 20 of the second edition Deduction:

Any manifold, therefore, that is given in a single empirical intuition, is *determined* in respect of one of the logical functions of judgment, and is thereby brought into one consciousness. Now the *categories* are just these functions of judgment, in so far as they are employed in the determination of the manifold of a given intuition. Consequently, the manifold in a given intuition is necessarily subject to the categories.<sup>85</sup>

“To be determined” is a technical term in Kant; there can be no doubt at all about this. To say that something is determined in this sense is to say that certain predicates apply to it: “*Determinare est ponere praedicatum cum exclusione oppositi*”, he says in the *Nova Dilucidatio*, and continued to use the term in this sense throughout.<sup>86</sup> The passage, then, goes beyond the claim that judgments are needed to establish reference. It asserts that certain determinations of the object of reference derive from the type of judgment that is employed to generate reference to that object. This thought, which is implicit in the *Metaphysical Deduction*, is here made explicit. But it is not proved.

We now have an overview of the drift of Kant's argumentation in establishing the connection between judgments and categories: he claims that there can be no reference except in the context of judgments. This point had been made previously with respect to perception. Kant extends it to objects of reference of any sort. He is confirmed in this by the then common conflation of perceptual and semantic reference. The next step in the argument is to hold that certain basic determinations of objects, namely the categories, derive from the judgment types that contribute to their constitution. I contend that the somewhat creaky joints of this argument do not become obvious unless we understand the sensationist foundation of Kant's thought. The critical questions one can raise against this

argument are: (1) Is it true that there is reference to objects only in the context of judgments? (2) May one identify semantic and perceptual reference, and on what grounds? (3) Given that there are different basic types of judgment, is the judgment type reflected in the objects it helps constitute? I will not pursue these matters, but will, instead, turn to the next theme, the problem of the "schematism".

## VI

It is a clear consequence of Kant's sensationism that a distinction is to be made between those properties of objects that arise from the constituent sensations, and those other properties that are the result of the synthetic activity of the mind. Kant distinguishes two types of synthesis, "figurative" and "conceptual".<sup>87</sup> Spatial disposition, such as shape and extension of objects, result from the first, whereas causal relations, substantiality and the like are attributable to things because of the second. Let us accordingly distinguish sensational properties from the "structural" attributes that result from synthesis.

The received opinion is that Kant postulated schemata for all concepts. A careful reading of the schematism chapter does not bear this out. It does not contain a single statement from which one may conclude that sensational properties have schemata. Rather, a division is made between schemata having to do with the spatial disposition of sensations, and those related to the pure concepts of the understanding. Though the latter have drawn more interest, it is worth paying some attention to the former. Kant says of them "The general procedure of the imagination for providing an image (a picture, *Bild*) for a concept I call the schema of this concept." We should take this quite literally. Kant did not think that sensations are mental images or pictures. There is nothing constructed in them, and there is thus no procedure for constructing them. There is no image of rose fragrance or of hardness or the taste of a wine, and there also is no image of red or of the shudder one feels when reading a poem. There *are* pictures of triangles, of plates, and of dogs. It is only concepts such as these, which involve an aggregation and synthesis of sensations, that have schemata. The schematism "is a rule of synthesis of the imagination."<sup>89</sup> "This schematism of the understanding in respect of the appearances *and their mere form* is an art concealed in the

depth of the human soul . . .”<sup>90</sup> As if to underline the point Kant goes on to speak of the “schema of sensible concepts (*as figures in space*)”.<sup>91</sup> (Kemp Smith translates “such as of figures in space”, which is not in the German). Kant thus does not claim that there is some entity or procedure intermediate between every concept and its instances; rather, he seems to hold that this is the case only with structural concepts. But what exactly is the function of the schematism? Even if we don’t understand how it works, can we figure out what it does?

We recall that in the sensationist tradition reference to objects requires that there be sensations, that they be in some sense retrievable through the imagination, and that a judgment comes into play. We also noted that Condillac had seen that this is not enough. What is needed, in addition, is a *heuristic* for the imagination, a “program” that keeps it from reproducing for the understanding just any pell mell collection of sensations. Not all such collections, and indeed only very few of them, may be judged “one thing”. Condillac had endowed one of the senses, touch, with an *intrinsic* heuristic. The hand, unlike the eye, does not wander aimlessly over the contours presented to it, but follows edges and shapes. Through touch the other senses are educated. Touch provides the “schemata” that allow one to see figures in space, and apply concepts to them.

But Condillac’s hypothesis runs counter to the sensationist premiss: the sensations of touch cannot, on that assumption, in themselves have any characteristics that force one to combine them in certain ways. Even if touch educates the eye, there has to be an explanation of what it is that educates touch.

Kant does not take the schematism to be an ability of the eye or the hand to select sensory input. He thought that there is a great deal more of this than we are ever conscious of, and did not take the needed heuristic to reside in the selective ability of the sensory organ. Rather, he thought it to be a capacity of the imagination. It seems that he wants to claim that the imagination somehow knows how to identify and reproduce just that subset of a given sensory manifold that forms an image for an appropriate concept. In order to form an image of a triangle the imagination must, so to speak, see its way clear to reproduce just those sensations that end up in the manifold of that image. Kant thinks of this ability as deeply hidden, and makes no attempt to explain how it works. He does, in particular, not suggest

that the imagination relies on sensational cues, topogenic sensations, or local signs. But I shall not pursue this point.

It seems clear that, although we do not know how this schematism works, it performs the heuristic functions that Condillac assigned to the hand, a point that is easily seen once Kant's sensationist roots are uncovered. It then becomes obvious that Kant never meant to assert that all concepts have schemata, but only those that are the results of synthesis. As concerns the schematism of the pure concepts of the understanding, Kant does not think it nearly as hidden as that of sensible concepts. Indeed, Kant thinks that it is quite clear how it works and indicates in detail the conditions under which the pure concepts are to be assigned to objects. Much has been said about this, and I shall not go over this well worked ground again. I will, rather, add a few remarks on the *Analogies*.

#### VII

I do not believe that a proper understanding of the *Analogies* is possible unless one realizes the peculiar limitations confronting a constructional system that rests on a sensationist basis. There are, specifically, three such difficulties that concern time: the conventional *metric* of time measurement is not intrinsic to the stream of sensations. Secondly, the succession of sensations, unlike the relation "before" or "after" defined over moments of physical time, is *not connected*. Thirdly, there is no *simultaneity* of events in the succession of sensations. These problems are attacked, if perhaps not finally resolved, in the *Analogies*.

The First Analogy attempts to establish two points. One of these is the *a priori* proof of the law of conservation of matter. I think that this proof is fallacious, or else that I have not grasped its significance. The second point is to introduce the concept of duration. The point here is, quite simply, that the introduction of the concept of a length of time must await the constitution of external objects, that within the realm of sensations this notion has no application. This was a point already well appreciated by Condillac. He insists that if a sensation persists without change, then, no matter how long it lasts in physical time, it will not be perceived as enduring longer than any other unchanging sensation:

A sensation which is retained uniformly during one year, or let us say a thousand, will only be one instant for our statue . . . The presence on one idea which does not vary, being only one moment with regard to myself, makes it possible that one moment in my duration can extend over the time of many moments in the duration of another.<sup>92</sup>

Kant does not belabour the point, but he makes it: "In mere succession existence is always vanishing and recommencing, and never has the least magnitude."<sup>93</sup> This connects with a point that he had made earlier, namely, that "Our apprehension of the manifold of experience is always successive, and is therefore always changing."<sup>94</sup>

The problem here is not, as some have thought, that the sequence of apprehensions differs from the sequence of events, as when I hear the sound of a falling tree *after* I see it drop, while I know it to be simultaneous with the fall that I see. It is, rather, to explain how we can speak of duration when the stream of sensations presents only succession. It is Kant's view, plainly, that duration requires objects, that is, reference. The First Analogy takes note of this by saying that such propositions, as that there is something permanent in appearance "are valid only in relation to a possible experience, and can therefore be proved only through a deduction of the possibility of experience."<sup>95</sup> Experience, for Kant, *always* involves objects. Merely having sensations is not experience. His point is, therefore, that the most important of the "modes of time", duration, presupposes reference to objects. It seems to me that beyond this the First Analogy contains no argument (other than the dubious transition to the conservation law). The rest of the chapter merely draws out some implications of this claim.

The Second Analogy deals with a further problem, which also arises because of the sensationist assumption. The relation of "before" or "after", as defined over the moments of physical time, is connected; that is, given any pair of distinct moments, one of them must occur before the other. The same does not hold for sensations as experienced by me. While it is true that my sensations, in physical time, satisfy this requirement, they are not *experienced* as doing so. Let an analogy make this clear: Suppose that Adam, on his fifth day, had wondered how to arrange the preceding four days in a temporal sequence. Suppose also that these four days were held in his memory merely as four internally connected sequences that had no experienced connection with each other, each night's sleep having interrupted the experienced succession. How could Adam have established the suc-

cession? Kant's answer to this sort of problem is not difficult to construct: Adam can connect his days only if he has at his command a sufficient repertoire of causal connections: he can arrange them if he knows that buds come before flowers, that leaves turn from green to yellow, and the like. He will have to invoke the principle *propter hoc ergo post hoc*. If he found a putative day that did not fit in, he would have to set it aside as, perhaps, a dream. This excludes all events that are not causally connected from the series of real days, and thus establishes the causal principle. It is the gist of Kant's answer to Hume, perhaps the most brilliant argument in the *Critique*.

But where does Kant say this? The clearest brief statement concerning connectedness occurs in the Third Analogy where he says, building on the Second Analogy, "Only that which is the cause of another, or of its determinations, determines the position of the other in time."<sup>96</sup> In the Second Analogy the point is argued at length. The argument is needed because sensations, as such, are not universally connected by the relation of "mere succession".

It is important not to misread the opening of the argument, when Kant speaks of the reversibility in the series of apprehensions of a house, and the irreversibility of the series in the case of causal connections.<sup>97</sup> This is not a preliminary version of the argument, but establishes a premiss of it: If it is not possible to discern particular regular sequences, the *propter hoc ergo post hoc* method can't get started. If Adam could never discover individual causal connections, he could not even begin to arrange the order of his days. Kant, consequently establishes a method for discovering such sequences, and discriminating them from the sequences in which we apprehend static objects. The actual argument takes off from there. A fuller discussion of it, which I have given elsewhere, involves a distinction between sensations, appearances and empirical objects. Adam's days are the analogues, not of sensations, but of certain complexes of them, appearances. Appearances, in this view, are objects on a constructional level intermediate between sensations and empirical objects. Appearances are empirical objects if they are located, as not all of them are, in physical space and time.

In the Third Analogy, Kant gives us an argument that, in effect, *constructs* simultaneity as a relation that obtains under the conditions of mutual causation, or reciprocal influence. The argument seems to imply that without causal connections between things there would be

*no* simultaneity. In Kant's view, the concept has no application to the stream of sensations. We never have two simultaneous sensations: "Each representation, *in so far as it is contained in a single moment*, can never be anything but absolute unity."<sup>97</sup> I am not sure that Kant stopped to think about some of the implications of this view: there is no indication that he saw that if this is so, then there must be mental mechanisms that discriminate the components of this apperceptive mass into visual, tactile, etc., sensations. But Kant *did* stop to think that if the representations contained in a single moment (these must be sensations) must have absolute unity, then simultaneity is not a fact of our sensational life, but a relation that obtains only between events in the physical world. The Third Analogy is an argument that shows, among other things, what is needed to "construct" this relation. It is a relation that must, like succession in physical time, be based on causal interconnection between events, and thus presupposes reference to objects.

## VIII

In conclusion I want to draw attention to one more passage that presupposes an understanding of Kant's sensationist leanings. I refer to the Antithesis of the Second Antinomy. The point is of more than passing interest since the *Thesis* contains a claim that not only Leibniz, but many others, including Russell, found wholly convincing, viz. that if one removed in thought all composition from a composite, simples would remain. What, in the end, is Kant's argument against this? It is, quite simply, that if one removed in thought all composition, then *no object* would remain, there would be no reference. Moving from composites to simples is a *metabasis eis allo genos*, a shifting from one sort of entity to another.

All composites do in fact contain simples, but not in the sense of the atomist: the simples are "extraposed" sensations that have been placed "outside and alongside" each other. They determine each other's spatial character. If composition is removed, no external object remains, only sensations. There can be no spatial atoms. Hence Kant says, "Everything real that occupies a space contains in itself a manifold of constituents external to one another, and is therefore composite."<sup>99</sup> None of these constituents would continue to occupy its position in space if all the others were removed, for it

would not remain as a point in space, merely as a sensation: "An absolutely simple object can never be given in any possible experience."<sup>100</sup> The stress here is on *object* and *experience*. The only simple of which we could conceivably be aware would have to be a state of ourselves, not of objects.

That this is the thrust of Kant's argument is put beyond doubt by the following reflection:

Since the essential aspect of these representations [space and time] is composition, nothing remains [hence no simple thing remains] when I remove this composition.<sup>101</sup>

I have made no effort to trace out the actual historical links that connect Kant with his sensationist predecessors, particularly Condillac. It would be useful to do so, but by no means necessary. The dissemination of information in the eighteenth century was rapid and thorough, and since the point of sensationism is rather simple and easily conveyed, it will be difficult to discover how Kant first came to think in its terms. My references to Condillac were not meant to imply that Kant had read him, though there is some evidence for this. I cited him because he gave the clearest possible expression to some of the tenets and problems of sensationism that Kant discussed. My references to Condillac were meant to elucidate Kant, not as part of a proof that Kant was, in fact, a sensationist. To that point the Kantian text must, and does, speak for itself.

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#### NOTES

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As is usual, 'A' refers to the first edition of the *Critique of Pure Reason*, 'B' to the second. Most of the quotations are taken from the translation of Normal Kemp Smith. In some cases I have made changes to make the English more faithful to the original; several of these changes are specifically indicated in the text. The numbering of the 'Reflections' is that of the Prussian Academy Edition, Berlin 1902 ff. (Cited as *Akad.*)

<sup>1</sup> H. J. Paton, *Kant's Metaphysik of Experience*, London 1936, vol. I, p. 67.

<sup>2</sup> N. Malebranche, *Recherche de la vérité*, Paris 1674, I 151 f. New edition Paris 1962.

<sup>3</sup> F. Brentano, *Psychologie vom empirischen Standpunkt*, I, Part 2, Hamburg 1955, pp. 109 ff.

<sup>4</sup> A 189/B 234 f.

<sup>5</sup> The expression is very common Kant, e.g. A 8, B 68, B 94, B 144, B 147, B 149, B 177, B 203.



- <sup>6</sup> A 190/B 235.
- <sup>7</sup> A 197/B 242.
- <sup>8</sup> H. Vaihinger, *Kommentar zu Kants Kritik der reinen Vernunft*, Stuttgart 1922, I, p. 5.
- <sup>9</sup> *Monadology*, No. 60.
- <sup>10</sup> *Principles of Nature and of Grace*, No. 2.
- <sup>11</sup> *Vernünfftige Gedanken von Gott, der Welt, und der Seele des Menschen*, 5th. ed., Frankfurt and Leipzig 1733, p. 488.
- <sup>12</sup> Johann Christian Gottsched, *Erste Gründe der gesamten Weltweisheit*, 6th. ed. Leipzig 1750, pp. 205 f.
- <sup>13</sup> A 320/B 376 f. Also *Logik Pölitz*, Akad. vol. 24/2, p. 565: "We have many representations that do not relate to an object."
- <sup>14</sup> Thomas Reid, *On the Intellectual Powers of Man*, II, XV, ed. Sir William Hamilton, Edinburgh 1880, p. 308.
- <sup>15</sup> C. A. Crusius, *Weg zur Gewissheit und Zuverlässigkeit der menschlichen Erkenntnis*, Leipzig 1747, p. 265.
- <sup>16</sup> A letter from Hamann to Herder May 17, 1779: "Kant is working busily at his moral (*sic.*) of pure reason, and Tetens is always before him."
- <sup>17</sup> Johann Nicolaus Tetens, *Philosophische Versuche über die menschliche Natur und ihre Entwicklung*, Leipzig 1777, repr. Berlin 1913, p. 9.
- <sup>18</sup> Ref. 695.
- <sup>19</sup> Locke, *Essay II*, I, 1.
- <sup>20</sup> Berkeley, *Principles* 1.
- <sup>21</sup> Hume, *Treatise* I, VII; ed. Selby-Bigge, Oxford 1888, p. 19.
- <sup>22</sup> *Treatise* II, I, 1.
- <sup>23</sup> *Principles* 41; *Hylas and Philonous* I; ed. Luce and Jessup, London 1949, vol II, p. 176.
- <sup>24</sup> *Principles* 30.
- <sup>25</sup> Hume, *Treatise*, I, VIII, Selby-Bigge p. 20.
- <sup>26</sup> 'Brentano's relation to Aristotle', *Grazer philosophische Studien* 5 (1978), 249-266.
- <sup>27</sup> *De Anima* III, 2; 425 b 12.
- <sup>28</sup> 1074 b 35.
- <sup>29</sup> *loc. cit.*
- <sup>30</sup> Condillac, *Treatise on the Sensations*, tr. Geraldine Carr, Los Angeles, 1930. p. 3.
- <sup>31</sup> Reid, *op. cit.* (n. 14), I, I, 1, p. 229.
- <sup>32</sup> Condillac, *op. cit.* (n. 30), p. 61.
- <sup>33</sup> Burke, *A Philosophical Enquiry into the Origin of our Ideas of the Sublime and Beautiful*, 1959, repr. N.Y. 1971, p. 259.
- <sup>34</sup> Condillac, *op. cit.* (n. 30), p. 68.
- <sup>35</sup> Reid, *op. cit.* (n. 14), II, 17, p. 315.
- <sup>36</sup> B 2.
- <sup>37</sup> Condillac, *op. cit.* (n. 30), p. 152.
- <sup>38</sup> *op. cit.*, p. 238.
- <sup>39</sup> *op. cit.*, p. 215 f.
- <sup>40</sup> *op. cit.* p. 59.
- <sup>41</sup> Cf. my 'Transcendental object and thing in itself', Akten des 4. Internationalen Kant-Kongresses, Mainz 1974, II, 1, pp. 186-195, *Kantstudien* 1974, Supplement.
- <sup>42</sup> A 19f./B 34.
- <sup>43</sup> B 208.

<sup>44</sup> B 207.

<sup>45</sup> A 28.

<sup>46</sup> B 44.

<sup>47</sup> A 169/B 211.

<sup>48</sup> Refl. 3958.

<sup>49</sup> This example occurs in *Kants Menschenkunde oder philosophische Anthropologie*, ed. Chr. Fr. Starke, Leipzig 1831. *Pain* occurs in the following example from the so-called *Pölitiz Logic* (Akad. 24, p. 565): "We have many representations that do not relate to an object, for example all inner sensations. They relate to the subject. If someone speaks to me, I have a representation that relates to the object; hence this is cognition (*Erkenntnis*); but if he yells so that my ears hurt, then it is sensation and I feel my own state."

<sup>50</sup> A 166/B 207.

<sup>51</sup> Refl. 755.

<sup>52</sup> Refl. 6355.

<sup>53</sup> Ref. 653, cf. 666.

<sup>54</sup> Rudolf Carnap, *The Logical Structure of the World*, Berkeley and Los Angeles 1967, p. 107.

<sup>55</sup> Refl. 710, 876.

<sup>56</sup> Norman Kemp Smith, *A Commentary to Kant's Critique of Pure Reason*, London 1923, p. 86.

<sup>57</sup> A 167/B 209.

<sup>58</sup> Refl. 327.

<sup>59</sup> Refl. 5390.

<sup>60</sup> B 151.

<sup>61</sup> *Metaphysik L<sub>1</sub>*, Akad. 28, p. 235.

<sup>62</sup> A 23/B 38.

<sup>63</sup> Refl. 5884.

<sup>64</sup> A 70 ff. /B 95 ff.

<sup>65</sup> Norman Kemp Smith, op. cit. (note 56), p. 179.

<sup>66</sup> R. P. Wolff, *Kant's Theory of Mental Activity*, Cambridge, Mass. 1963, p. 77.

<sup>67</sup> A 320/B 377.

<sup>68</sup> Leibniz to Gabriel Wagner, 1696. *Deutsche Schriften* ed. G. E. Guhrauer, Berlin 1838, p. 379.

<sup>69</sup> Johann Christoph Adelung, *Wörterbuch der hochdeutschen Mundart*, Leipzig 1793, entry "*Erkenntnis*", pp. 1906 f.

<sup>70</sup> A 105.

<sup>71</sup> A 77/B 103 f.

<sup>72</sup> *Metaphysische Anfangsgründe der Naturwissenschaften*, A 20.

<sup>73</sup> G. Frege, *Die Grundlagen der Arithmetik*, Repr. Hildesheim 1961, p. 71.

<sup>74</sup> *Tractatus* 3.3.

<sup>75</sup> W. V. O. Quine, *From a Logical Point of View*, Cambridge 1961.

<sup>76</sup> A 51/B 75.

<sup>77</sup> *ibid.*

<sup>78</sup> Akad. 24, p. 257; p. 755; p. 905.

<sup>79</sup> A 320/B 377.

<sup>80</sup> A 25/B 39.

<sup>81</sup> Refl. 754; cf. 756: *Beim Menschen zeigen wir sie (conceptum singularium) durch nomina propria an.*

<sup>82</sup> B 162.

<sup>83</sup> B 424.

<sup>84</sup> B 151.

<sup>85</sup> B 143.

<sup>86</sup> Akad. 1. p. 391. Cf. A 571/B 599 f.

<sup>87</sup> B 151.

<sup>88</sup> A 140/B 180.

<sup>89</sup> A 141/B 180.

<sup>90</sup> A 141/B 180.

<sup>91</sup> A 142/B 181.

<sup>92</sup> Condillac, *op. cit.* (n. 30), p. 40.

<sup>93</sup> A 183/B 226.

<sup>94</sup> A 182/B 225.

<sup>95</sup> A 184 f./B 228.

<sup>96</sup> A 212/B 259.

<sup>97</sup> A 190/B 235. ff.

<sup>98</sup> A 99.

<sup>99</sup> A 436/B 464.

<sup>100</sup> A 437/B 465.

<sup>101</sup> Refl. 5876.