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Transcendental Concepts, Transcendental Truths and Objective Validity

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Abstract

Kant insists that the use of concepts must be subject to empirical conditions if they are to have objective validity. This article analyses Kant's principle of objective validity, focusing particularly on its application to transcendental concepts such as those of sensibility, understanding and transcendental apperception. It distinguishes between two orders of objective validity, based on Kant's distinction between empirical and transcendental truths. Since transcendental concepts are pure concepts without spatio-temporal content, their objective validity is of the same second-order kind as that of unschematized categories. This characteristic of transcendental concepts implies that the cognitive powers picked out by them are not particular psychological mechanisms, but rather abstract functional structures. Transcendental concepts owe their objective validity to the realizability of the functional structures by empirical cognizers like humans. This relation in turn helps to explain the nature of transcendental truths.

Keywords: Kant, verificationism, faculty of cognition, schematization, functionalism

Kant maintains the principle that *a concept has objective validity only if it is related to empirical intuitions*. I shall call this the *principle of objective validity*. There is little doubt that the principle plays a crucial role in Kant's epistemology and his critique of traditional metaphysics, but it is unclear what 'objective validity' means and in what ways concepts acquire objective validity by being related to empirical intuitions. Nor is it clear what the relation is. Some interpretations of the principle may undermine the very possibility of Kant's project. Kant attempts to answer epistemological and metaphysical questions by investigating the *faculty of cognition*. His theory employs a set of theoretical concepts such as sensibility, understanding and transcendental apperception that describe the necessary functions of

cognition; I shall refer to those theoretical concepts that describe the faculty of cognition as *transcendental concepts*. Since these are not concepts of objects that can be given in intuition, there is a problem of how the transcendental concepts themselves can acquire objective validity.

This article aims to clarify Kant's principle of objective validity and to explain in what sense transcendental concepts can have objective validity. It begins by discussing a verificationist interpretation inaugurated by Peter Strawson (1966) and Jonathan Bennett (1966, 1974). Their verificationist interpretation, despite considerable textual support (A239/B298, A262/B318, A289/B346),[1] is widely rejected in more recent Kantian literature (Allison 1983: 61; Bird 2006: 15, 346; Greenberg 2008: 56; Westphal 2004: 42–4). In order to understand Kant's position, some distinctions have to be made. Kant's theory distinguishes between two levels of conceptual content which can be called those of the *logical/analytic* and the *real/objective significance* of concepts. It is the latter that matters, and there are two different ways a concept can acquire objective significance and validity: either it is related to empirical intuitions by virtue of its applicability to objects or, in the case of certain pure concepts, it belongs to the conditions that first make the *general relation* of concepts to empirical objects possible. These two ways of acquiring objective validity roughly correspond to Robert Hanna's distinction between primary and secondary objective validity (2001: 91), but I shall draw the distinction somewhat differently, referring to them as *first-order* and *second-order* objective validity. I shall explain in what sense second-order objective validity can be ascribed to transcendental concepts and argue that the key feature of transcendental concepts is the absence of spatio-temporal and causal content. Accordingly, sensibility, understanding and transcendental apperception do not describe anything in spatio-temporal reality, nor any cognitive mechanisms of the human mind; instead they are only theoretical constructs representing abstract functions. These functions are to be realized empirically by concrete cognizers such as humans, and it is the possibility of an empirical realization that confers second-order objective validity on transcendental concepts by making them *indirectly* related to empirical objects. This structure helps to explain in what sense transcendental truths are said to make empirical truths possible.

1. A Verificationist Interpretation

Let us begin with the key passage in which Kant puts forward the principle of objective validity:

> all concepts and with them all principles, however *a priori* they may be, are nevertheless related to empirical intuitions, i.e., to

> data for possible experience. Without this they have no objective validity at all, but are rather a mere play, whether it be with representations of the imagination or of the understanding. (A239/B298)

Kant considers the principle of objective validity to be applicable to all concepts, regardless of whether they are ordinary empirical concepts, mathematical concepts, pure categories, transcendental concepts or other *a priori* concepts. The concept of objective validity is a specifically Kantian notion, playing a crucial role in Kant's distinction of the legitimate uses of concepts from illegitimate ones. Concepts having no objective validity, as in the case of many metaphysical concepts, are dismissed as 'a mere play'. However, it is unclear how concepts, *a priori* concepts in particular, can be related to empirical intuitions and acquire objective validity.

It would be helpful to begin with an interpretation that reads Kant's principle as a sort of verificationism. Such an interpretation was as noted put forward by Strawson, who refers to it as the *principle of significance*:

> This is the principle that there can be no legitimate, or even meaningful, employment of ideas or concepts which does not relate them to empirical or experiential conditions of their application. If we wish to use a concept in a certain way, but are unable to specify the kind of experience-situation to which the concept, used in that way, would apply, then we are not really envisaging any legitimate use of that concept at all. In so using it, we shall not merely be saying what we do not know; we shall not really know what we are saying. (1966: 16)

Strawson's idea is that the bounds of sense determine not merely the bounds of knowledge or true judgements, but even that of intelligibility. Concepts without objective validity would simply be meaningless. When we use concepts without objective validity, we could not utter any meaningful statements nor even understand what we are saying. Furthermore, Strawson interprets the required relation of concepts to empirical intuitions in a verificationist fashion. If there is no empirical observation or situation that would count as evidence for or against the certain employment of a concept in a judgement, then the judgement would be unintelligible and the employment of that concept illegitimate. Strawson's reading places Kant very close to British empiricism and logical positivism, as this principle of significance sets similar criteria for cognitive significance as the *verification principle* (1966: 18). Another

influential Kant scholar in the same period, Bennett, offers a more explicit verificationist interpretation of Kant, ascribing *concept-* and *meaning-empiricism* to him (1974: 27).[2]

A verificationist interpretation of Kant may appear odd to many, but Kant's commitment to the empirical dependence of concepts makes this reading plausible, at least *prima facie*. Even such sympathetic Kant interpreters as Henry Allison admit that:

> Certainly one cannot deny that Kant frequently argues in a verificationist fashion. It is, after all, a central tenet of the *Critique* that a concept must have a sensible referent if it is to have objective reality, that is, empirical significance. (1983: 61)

The dependence of concepts on empirical intuitions is a result of Kant's distinction between sensibility and understanding as two irreducible faculties of cognition. In order to express any knowledge, we have to use concepts to form judgements, but judgements cannot be true unless they are capable of describing objects. Such employments of concepts must be subject to conditions that allow the judgements to be related to the objective world. Thus the possibility of cognition depends on a more fundamental possibility of relating representations to objects. The latter possibility, as Kant wrote in a letter to Marcus Herz, 'constitutes the key to the whole secret of metaphysics' (Kant 1999: 133; 10: 130). Kant's distinction of sensibility from understanding implies that the function of relating to objects neither belongs nor is reducible to the function of judging or the use of concepts, but must rely, directly or indirectly, on intuition.[3]

If the function of relating to objects is performed by intuitions, there is a question of how concepts can be related to objects and acquire objective validity. Kant's notion of objective validity, which is often but not always used synonymously with the notion of *objective reality*,[4] can be applied to all kinds of representations including intuitions, concepts and judgements, expressing their respective way of being related to objects. In the case of concepts, they are related to objects by virtue of being *applicable to* them. It is to be noted that Kant distinguishes between two different senses of object: between a real, thick sense of an object which can properly be said to *exist* in the objective world, and a logical, thin sense of an object which includes anything of which something can be predicated in a judgement:

> Now one can, to be sure, call everything, and even every representation, insofar as one is conscious of it, an object; only what

> this word is to mean in the case of appearances, not insofar as they are (as representations) objects, but rather only insofar as they designate an object requires a deeper investigation. (A189–90/B234–5)

Every logically consistent concept has its 'object' in the logical, thin sense, but this does not mean that every concept 'designates' an object in the real, thick sense. Only when there can possibly be real objects that fall under a particular concept does the concept have objective validity.

In order to ensure the applicability to objects, any application of concepts must be subject to the conditions under which objects are given and the content of the concepts must thus be consistent with the spatio-temporal forms of intuitions. As empirical concepts are formed *a posteriori* through empirical intuitions, the sensible forms have already been included in their formation. However, a '*pure* concept is one that is not abstracted from experience but arises rather from the understanding even *as to content*' (Kant 1992: 590; *Jäsche Logic*, 9: 92), and its content is not automatically compatible with the sensible forms. There are pure concepts, such as pure geometrical concepts, whose content is derived from and is thus automatically compatible with the forms of intuition, but there are other pure concepts, including pure categories and transcendental concepts, whose objective validity is in need of justification. Kant's crucial idea is that, although pure concepts do not have empirical origins, they must still be mediated by the sensible conditions of intuitions in order to ensure objective validity. The pure categories of the understanding in particular have to gain their empirical applicability through *transcendental time determination*, being transformed into temporal schemata that are homogeneous to empirical intuitions (A138–9/B177–8).

If the application of concepts must be subject to empirical conditions, the possibility of metaphysics is in danger, since it is quite obvious that metaphysical concepts are, by their very nature, unrelated to empirical intuitions. The principle of objective validity certainly plays an important role in Kant's Dialectic.[5] According to Strawson and Bennett, much of Kant's ground-breaking ideas and his critique of metaphysics therein follow logically from the principle of objective validity. However, their verificationist reading does not do justice to Kant's subtle position. If all employment of metaphysical concepts is, in principle, devoid of objective validity, why does Kant have to trouble himself with such a detailed critique of metaphysics in the Dialectic? He could simply have dismissed all metaphysical debate, just as the logical positivists did, and the

Dialectic could have been much shorter, even if Kant still had other problems to deal with in the Dialectic.

More problematic is the fact that the verificationist interpretation would affect the very theoretical foundation on which Kant develops his epistemology, and this is the main problem that I address in this article. How can those transcendental concepts such as sensibility, understanding and transcendental apperception acquire objective validity? They are supposed to be conditions that make experience possible, but are themselves neither part of the empirical world nor experienceable through sensible intuitions. How can a theory that is built around these transcendental concepts be objectively valid and true? The verificationist interpretation, if correct, would not only eliminate the metaphysical theory of transcendental idealism, but also undermine the very foundation on which Kant's epistemology, including the principle of objective validity itself, is based.[6]

2. Logical/Analytic versus Real/Objective Significance

Despite his rationalist commitment to the existence of pure concepts, Kant is aware of the risk that the content of pure concepts may be a mere construction:

> For every concept there is requisite, first, the logical form of a concept (of thinking) in general, and then, second, the possibility of giving it an object to which it is to be related. Without this latter it has no sense, and is entirely empty of content, even though it may still contain the logical function for making a concept out of whatever sort of *data* there are. (A239/B298; cf. A262/B318, A289/B346)

In claiming that a concept without the possibility of being given an object 'has no sense, and is entirely empty of content', the above passage seems to provide a stronger support for the verificationist interpretation. However, lacking objective validity and having no sense do not mean the same thing; concepts without objective validity are not *literally* empty of content. A more precise differentiation can show where the verificationist interpretation went wrong.[7] To begin, Kant distinguishes between concepts of understanding and concepts of reason. The latter are Ideas, which would straightforwardly be empty of content according to the verificationist interpretation. But if all Ideas were literally empty, we would be unable not only to know anything about their objects, but even to make meaningful statements about them. Moreover, the pure

categories would also be empty of content until they were schematized. Kant has indeed suggested that, when abstracted from their sensible conditions, the pure categories would 'lose all meaning' and become 'empty titles for concepts without any content' (A679/B707),[8] but how could the categories be distinguished from each other if they were literally empty?

A distinction between different senses of 'content' has to be made. The categories of substance and causality, for example, would be left with 'the logical representation of the subject' (A242/B300) and the representation of 'something that allows an inference to the existence of something else' (A243/B301), respectively, which would specify the *logical content* of the unschematized categories, i.e. content analytically contained in the concepts. In order to become applicable to the empirical world, the categories need to be further determined in a way that makes their content homogeneous to what can be given in sensibility. In other words, they need to have a content that objects given in intuition could possibly satisfy so as to fall under them. The schematization thus *enriches* the pure categories with *temporal determinations*, making them appropriate for empirical employment.

For Kant, schematization does not just add further determinations to the pure categories, simply making them more specific, but rather transforms the pure logical content into appropriate temporal relations. It may appear that the unschematized category of cause, for example, is applicable to every empirical object to which the schematized category of cause is applicable, since the latter seems to pick out a subset of things that are picked out by the former, just as the concept of animal is applicable to everything to which the concept of mammal is applicable. However, schemata do not just represent a further specification of pure categories. Instead, schematization gives a definite temporal interpretation to the pure categories, which would otherwise remain indeterminate as to how they are to be applied to temporal appearances. Without schematization, it is indeterminate whether it is, for instance, the pure concept of cause or that of effect that is applicable in an empirical situation. As Kant explains:

> in that case [i.e. in the case of the concept of a cause as a pure category] not only would there be nothing through which cause and effect could be distinguished, but further, since the possibility of drawing this inference also requires conditions about which I would know nothing, the concept would not even

> have any determination through which to apply to any object. (A243/B301)

Pure categories do not have content that is appropriate for empirical application; yet they do have 'the logical form of a concept'. Since all concepts are connected with each other in a complicated logical relationship, the logical form of a concept is its specific logical connection with other concepts, which determines the *intension* of the concept.[9] This can be called the *analytic* or *logical* significance of the concept in contrast to its *objective* or *real* significance in the sense of empirical applicability.[10] The logical significance of a concept amounts to the content after abstraction from all sensible content.[11]

Theoretically, it is possible to arbitrarily invent or construct any concept independently of all sensible conditions. An arbitrary concept has its specific logical significance and can be defined precisely (*Jäsche Logic,* 9: 141–2; *Blomberg Logic,* 24: 268–9), but this intensional content alone does not guarantee empirical applicability. Surely, pure categories are not just arbitrarily constructed concepts, but their object-relatedness has to be provided by sensible intuitions. Now 'if one removes this [sensible] condition, all significance, *i.e.*, *relation to the object* [my italics], disappears' (A241/B300). What is absent in a concept lacking objective validity is the *relation to objects*. Any arbitrarily constructed, logically meaningful concept has its objects in the logical, thin sense, but whether it can possibly be applied to an object in the real, thick sense is what the principle of objective validity is about.

Kant's principle does not deprive empirically unrelated concepts of logical or intensional content, but only of their real significance in the sense of object-relatedness, leaving them *extensionally empty*. Empirical concepts can happen to have empty extension, as in the case of a unicorn, but concepts without objective validity are extensionally empty *on principle*. Put in metaphysical terms, there exists nothing that could *possibly* fall under any concept lacking objective validity. This may sound a rather strong metaphysical thesis, but as I have argued elsewhere (Lau 2010: 125–33) it follows logically from Kant's theory of categories and the synthetic principles of pure understanding. According to the Second Postulate of Empirical Thinking, the category of existence or actuality is only applicable to something 'which is connected with the material conditions of experience (of sensation)' (A218/B266). Thus only things that are subject to the sensible, spatio-temporal conditions of experience can be said to exist, and this rules out the existence of

non-spatio-temporal objects such as abstract entities. All objects in the real, thick sense exist in the spatio-temporal realm.

Based on the above distinctions, we are in a position to spell out the principle of objective validity more precisely. Since there is no other use of concepts than in judgements, the principle can be explained in terms of properties that apply to judgements. Judgements can be either analytic or synthetic. For Kant, the truth of analytic judgements depends solely on the conceptual relationship between subject and predicate (A6–7/B10–11). Since concepts can be constructed artificially, it is possible to make *analytically true* judgements about the constructed conceptual relationships without relating them to the objective world. In other words, if the judgements only determine the logical relations between concepts in respect to their analytic or logical significance, it is possible to form analytically true judgements with concepts lacking objective validity.

However, if concepts are to form synthetically true judgements, they cannot simply be arbitrarily constructed. The truth of synthetic judgements depends no longer merely on conceptual relationships, but also on external states of affairs. If the concepts employed in a judgement have no objective validity, the judgement as a whole would fail to be related to any objects in the real, thick sense. Since Kant adopts the traditional correspondence conception of truth (A58/B82), a synthetic judgement without objective validity can never turn out to be true because no correspondence could ever hold if a judgement is not related to an object. Synthetic judgements with objective validity can be true or false; without objective validity, they could never be true. Therefore, objective validity in respect to synthetic judgements means *truth-aptness*, although I shall leave it open whether judgements without objective validity should be called false or rather lacking in truth value. Kant's principle of objective validity can thus be specified as follows: *A synthetic judgement can be true only if all the concepts in it have objective validity*.

Applying the above distinction to pure concepts such as categories seems to imply that pure categories are left with their logical significance until they are enriched with sensible content and transformed into *schemata*. Kant also warned against the tempting misuse of pure categories, particularly in making metaphysical claims:

> since (as merely pure categories) they are not supposed to have empirical use, and cannot have transcendental use, they do not have any use at all if they are separated from all

> sensibility, i.e., they cannot be applied to any supposed object at all. (A248/B305)

What happens when this claim is applied to transcendental concepts? Indeed, what is the nature of *this claim itself*? The question is not about how the claim can be justified, but how it should be understood or whether it is intelligible. Kant's principle of objective validity raises the threat that the concepts involved in the above claim may have no objective validity and thus that the claim itself cannot be synthetically true. Or is the claim a *merely analytic* description of the concept of pure categories? Whether or not the claim is analytic depends on a set of concepts including categories, objects, sensibility and understanding. Obviously, Kant cannot just *define* these concepts at will in order to make his theory analytic. For Kant in fact philosophy, unlike mathematics, should not start with definitions (A730/B759). Philosophy is essentially different from mathematics, which has the privilege of being able to guarantee the objective validity of concepts that it *constructs* arbitrarily. Philosophical concepts, by contrast, are susceptible to a lack of objective validity. The failure to understand the difference between mathematical and philosophical cognitions accounts for many of the mistakes traditional metaphysics has made. If Kant wants to avoid the charge he has brought against traditional metaphysics, his theory has to guarantee the objective validity of its own transcendental concepts.

3. Empirical versus Transcendental Truth

Kant's concept of objective validity is subtly connected with his concept of truth, and the connection offers a way to account for the objective validity of transcendental concepts. Although Kant did not distinguish between different senses or orders of objective validity, he did distinguish between empirical and transcendental truth, and, along with it, between empirical and transcendental cognition. According to Kant's correspondence theory, the truth of an empirical cognition consists in 'the agreement of [the] cognition with its object' (A58/B82). The agreement with objects is a specific kind of relation to objects, and empirical truths depend on the object-relatedness of concepts involved in the cognition. This object-relation is something that Kant has to account for in his theory of cognition. If his theory is to be successful, it must contain a great deal of *true descriptions* about the *conditions of* cognition. This kind of truth, if any, cannot again be empirical, but must be of another kind, to which Kant refers as *transcendental truth*:

> All of our cognitions, however, lie in the entirety of all possible experience, and transcendental truth, which precedes all

> empirical truth and makes it possible, consists in the general relation to this. (A146/B185)

While empirical truths consist in particular correspondences of judgements to their objects, transcendental truths are about the general subject–object relation that makes particular correspondences and thus empirical truths possible (Hanna 1993: 9). It is, however, unclear how transcendental truths can be compatible with Kant's correspondence conception and what transcendental truths are true of. The nature of transcendental truths certainly hinges on Kant's notion of *transcendentality*. Although the notion has been used by Kant in a variety of contexts, and sometimes in slightly different senses, it is primarily predicated of a particular kind of *a priori* cognition.

> I call all cognition transcendental that is occupied not so much with objects but rather with our mode of cognition of objects insofar as this is to be possible *a priori*. (B25)

> … not every *a priori* cognition must be called transcendental, but only that by means of which we cognize that and how certain representations (intuitions or concepts) are applied entirely *a priori*, or are possible (i.e., the possibility of cognition or its use *a priori*). Hence neither space nor any geometrical determination of it *a priori* is a transcendental representation, but only the cognition that these representations are not of empirical origin at all and the possibility that they can nevertheless be related *a priori* to objects of experience can be called transcendental. (A56/B80–1)

'Transcendental' and 'empirical' are not contradictory notions, although the former implies the negation of the latter. There is non-empirical cognition which is not qualified as transcendental, including analytic judgements and pure geometry. Transcendental cognition is a subset of synthetic *a priori* cognition, which deals reflexively with the very conditions of the possibility of cognition (Bubner 1975). Transcendental cognition and transcendental truth are both about the general relation of cognition to objects. They do not directly describe any object that exists in spatio-temporal reality, but rather the conditions under which true descriptions of spatio-temporal reality become possible. If ordinary empirical cognition is a *first-order* cognition of objects, then transcendental cognition is a *second-order* cognition that accounts for the conditions of first-order cognition. The same structure applies to the relation between empirical and transcendental truths. However, it is

unclear in what sense transcendental truth 'precedes all empirical truth and makes it possible' (A146/B185). The relation is certainly not a causal one, but something of a more abstract nature. I shall come back to this problem at the end of the article.

According to Kant's theory, the conditions of the possibility of experience consist of a complex system of cognitive faculties and their formal structures, including the spatio-temporal forms of sensibility and the categories of understanding. Everything in possible experience must conform to these subjective forms since they determine the basic structures that define what can possibly exist as an object. Kant's theory has to show that the descriptions of sensibility, understanding and their formal structures are largely true. Since these descriptions of the faculty of cognition, if true, are transcendental and not empirical truths, they cannot be empirical descriptions of the factual features of the human cognitive system. Accordingly, transcendental concepts such as those of sensibility and understanding do not, at least not directly, pick out any cognitive module or mechanism of the human mind.

Now if the transcendental concepts do not describe any empirical objects, they would not have objective validity according to the principle of objective validity discussed above, and this would imply that *no synthetically true judgement* could be formed with them. However, these transcendental concepts are indispensable constituents of transcendental truths, which are synthetic. There must be another sense of objective validity and significance that transcendental concepts can legitimately lay claim to. It turns out that Kant identifies the objective validity or reality of these concepts with their transcendental truth:

> Thus only from the fact that these concepts [categories] express *a priori* the relations of the perceptions in every experience does one cognize their objective reality, i.e., their transcendental truth, and, to be sure, independently of experience, but yet not independently of all relation to the form of an experience in general and the synthetic unity in which alone objects can be empirically cognized. (A221–2/B269)

An alternative way for concepts to acquire objective validity is to demonstrate a relation, not to a particular experience or empirical objects, but to 'the form of an experience in general'. Although Kant was thinking mainly of the categories, this sense of objective validity also applies to such non-empirical concepts as those of sensibility and

understanding, which in turn determine what categories mean. These transcendental concepts are not related to any particular object, but they are related to *all experience*, though *indirectly* by being 'strictly *a priori* conditions for a possible experience, as that alone on which its [*sic*; i.e. their] objective reality can rest' (A95).

If objective validity means applicability to objects or object-relatedness, there turn out to be two different kinds: the ordinary empirical one 'consists of elements of a possible experience', while the transcendental one 'belongs itself within the concept of possible experience' (A95). The 'concept of possible experience' or 'the form of an experience in general' (A222/B269; cf. A125) specifies the necessary structure, including the functions of the faculty of cognition, for the possibility of experience. It is thus not any particular experience but rather the form of possible experience *as a whole* that provides the ground for transcendental concepts to gain objective validity and form transcendental truth. The latter kind of validity is of second order, in comparison to the first-order objective validity of empirical concepts because the objective validity of transcendental concepts does not, at least not directly, consist in their applicability to empirical objects, but rather in their validity to the structure by virtue of which empirical concepts can be related to objects and acquire first-order objective validity. In contrast to the empirical significance of ordinary concepts, transcendental concepts can be said to have *transcendental* significance (Westphal 2004: 46–50).[12]

Hanna makes a similar distinction between these two levels of objective validity: a 'distinction between "primary objective validity" (POV) and "secondary objective validity" (SOV)' (2001: 91–2). Having offered a very detailed specification of them (2001: 92–5), Hanna does not provide any argument for the distinction nor an explanation of why certain non-empirical concepts can have SOV at all. I shall attempt to offer an account of the relation between first-order and second-order objective validity in the next section. However, an important hint can be given by comparing another difference between Hanna's distinction and mine. Hanna draws the wrong line between the two levels of objective validity. He is mistaken in claiming that 'all the transcendental principles including the Axioms of Intuition, the Anticipations of Perception, the Analogies of Experience, and the Postulates of Empirical Thought, have SOV but not POV' (2001: 94). It is true that pure categories, prior to their schematization, are not related to empirical intuitions and thus lack first-order objective validity (or POV). They obtain SOV through their respective schemata, which have incorporated the form of time and are applicable in empirical

reality. This shows that the temporal schemata themselves must have POV. When we describe the causal relations of natural phenomena, we are *directly* applying a causal schema to objects of experience based on the Second Analogy. Hanna is thus wrong in denying the POV of the schemata and principles.[13]

Now the relation between unschematized categories and temporal schemata offers an important clue for understanding in what sense transcendental concepts can lay claim to second-order objective validity. As explained above, Kant's faculty of cognition cannot be equated with the human cognitive system, which is, in a sense, just a contingent product of the long process of evolution. By contrast, cognitive faculties such as sensibility and understanding represent the necessary functional requirements that determine the structure of cognition and even the structure of the objects of cognition. If a pure category can become applicable to objects through *temporal schematization*, then, in a similar way, transcendental concepts can acquire objective validity through a transformation comparable to the schematization of pure categories. It thus remains to be explained in what sense transcendental concepts can be 'schematized' and become related to the psychological mechanisms of empirical cognizers such as humans.

4. Transcendental Concepts and Empirical Realizations

In order to account for the conditions of possibility of objective cognition, Kant has to engage in a kind of theoretical reflection on the faculty of cognition and its relation to objects. While focusing on the conditions of first-order cognition of empirical objects, Kant has only made occasional remarks on the nature of second-order transcendental cognition. I shall now try to infer the characteristics of transcendental concepts and truths based on the framework developed above.

According to Kant, the subjective forms of cognition can be validly applied to all objective cognition because objects of cognition are nothing but *appearances* whose reality depends, in a sense, on our faculty of cognition. What can become an object of cognition must be subject to the spatio-temporal forms of sensibility and the categories of understanding, unified under transcendental apperception. However, since this object-relatedness finally rests on intuitions, it is the spatio-temporal framework, instead of the categories, that determines the bounds of empirical objects. As space is only the form of outer sense and thus its form does not apply to all appearances, the bounds of all empirical reality are determined by and are identical to the bounds of time. But while all

appearances are in time, the conditions that ground the temporality of all appearances are not. Thus Kant could not have explained why appearances must be arranged in a temporal order by describing mental processes that take place in time, since this would have assumed the very thing that has yet to be accounted for. In a sense, it is the subject's cognitive conditions that first 'produce' time and space, and so the conditions of temporality cannot be anything temporal (B422).

Since transcendental cognition is about the grounds or conditions of empirical cognition, its 'objects' cannot be *in* space and time. Transcendental cognition certainly includes descriptions about the necessary forms of space and time in empirical cognition, but the descriptions are merely about the *concepts of* space and time and not about anything spatio-temporal. If Kant's accounting for the conditions of empirical cognition and reality is based on a theory of the faculty of cognition, the cognitive faculties such as sensibility and understanding do not represent any cognitive modules of a human brain or any psychological process that takes place in time. In analysing the cognitive functions that are necessary for empirical cognition, Kant often gives the impression of describing hidden psychological mechanisms, but this impression is false and incompatible with his transcendental idealism.[14] Because temporality is a necessary condition of the schematized category of *causality*, the cognitive functions described in the *Critique*, such as intuition, synthesis and apperception, cannot be equated with any proper causal mechanisms either. The whole transcendental theory of the faculty of cognition does not appeal to any spatio-temporal properties, which implies the absence of all schematized categories including causality.

The absence of spatio-temporal and causal relations in transcendental cognition is a logical consequence of Kant's distinction between sensibility and understanding. The spatio-temporal form of intuition has no role to play in a discourse in which no reference to any empirical object will be made. Second-order transcendental cognition includes an analysis of the *concept of* objects in general without amounting to first-order cognition of objects. Kant repeatedly emphasizes that cognition requires both sensibility and understanding. If the above analysis is right, then this requirement applies only to first-order cognition of empirical objects, not to second-order transcendental cognition. Transcendental cognition does not rely on sensibility and its spatio-temporal form, but only on pure concepts, which, as explained above, have logical or analytic significance independent of empirical intuitions. Kant's theory does not rule out the possibility of using concepts independently of intuitions,[15] but only

denies that such use of concepts can lead to 'a greater sphere of objects' (A254/B309). The possibility of using concepts independently of intuitions does not violate Kant's famous dictum: '[t]houghts without content are empty, intuitions without concepts are blind' (A51/B75). This is because such use of concepts is indeed *empty* in the sense of lacking empirical significance or first-order objective validity. Transcendental cognition does not lead to any cognition of objects in the real, thick sense. There are no objects in the proper sense to which concepts such as sensibility, understanding and transcendental apperception can apply, at least not directly.

The cognitive faculties are objects of transcendental cognition only in the logical, thin sense, defined by unschematized concepts. Just as unschematized categories abstract from the sensible form of time, the cognitive faculties of sensibility and understanding are not conceived in spatio-temporal or causal terms either. For example, while sensibility is the capacity to 'relate to objects' (A19/B33), occupying what is nowadays known as the function of reference, understanding provides the categorial unities for the organization of concepts and transcendental apperception provides the ultimate unity to which all the representations of a cognitive subject must be ascribable. All these functions are said to belong to the faculty of cognition, which as an object in the logical, thin sense is a merely theoretical construct that specifies the necessary functional constraints for all possible cognizers. By contrast, the human mind is a concrete cognitive system that operates in spatio-temporal reality. If human beings are in fact capable of cognition, the implication of Kant's theory has it that the human brain must somehow have evolved the cognitive capacities and operations that appropriately execute the functions specified by sensibility, understanding and transcendental apperception. In this sense, the human cognitive system can be seen as a particular biological instantiation of Kant's faculty of cognition. As the transcendental concepts express specific functional structures, it is natural to appeal to the functionalist terminology to call this instantiation an 'empirical realization'.

Although the transcendental concepts that describe the faculty of cognition stipulate abstract functional requirements using unschematized categories, their empirical counterparts realize the functional constraints in spatio-temporal reality by appropriate causal mechanisms. This transcendental-empirical relation can best be illustrated by Kant's distinction between transcendental and empirical apperception. Although transcendental apperception is, for Kant, the most fundamental cognitive

function that provides the ultimate *logical* unity for all representations that can possibly be ascribed to a cognizer (B131–2), it is not anything experienceable in inner sense, in which nothing continuously identical is to be encountered.

> The consciousness of oneself in accordance with the determinations of our state in internal perception is merely empirical, forever variable; it can provide no standing or abiding self in this stream of inner appearances, and is customarily called *inner sense* or *empirical apperception*. (A107)

Empirical apperception, which is the consciousness of one's own existence in time or identity over time, is the empirical counterpart of transcendental apperception. This is no longer a transcendental concept, but depends on the empirical consciousness of external persisting objects, as Kant argued in the Refutation of Idealism (B274–9). Kant also distinguished between transcendental and empirical aspects of other cognitive functions, suggesting in the following passage that each of the three basic cognitive powers can be considered empirically on the one hand and transcendentally on the other:

> The possibility of an experience in general and cognition of its objects rest on three subjective sources of cognition: *sense*, *imagination*, and *apperception*; each of these can be considered empirically, namely in application to given appearances, but they are also elements or foundations *a priori* that make this empirical use itself possible. *Sense* represents the appearances empirically in *perception*, the *imagination* in association (and reproduction), and *apperception* in the *empirical consciousness* of the identity of these reproductive representations with the appearances through which they were given, hence in *recognition*. (A115; cf. A94)

I have in another paper developed a detailed functionalist account of the distinction and relation between transcendental cognitive functions and their empirical counterparts (Lau 2014); here I shall confine my discussion to the problem of objective validity and the relation between transcendental and empirical truths. The transcendental–empirical distinction is one of the most important ideas in Kant's *Critique*, but rarely has it been consistently maintained by commentators, and even Kant himself is not very consistent either. The failure to distinguish transcendental cognitive functions from their empirical realizations has led to the

accusation of *psychologism*.[16] The empirical realizers are temporal, causal and psychological, but the cognitive functions that belong to Kant's account of the possibility of experience and objects of experience are not. Nevertheless, in order for Kant's account to be successful, these transcendental concepts have to be, in principle, realizable by causal-psychological mechanisms that fulfil the functional requirements.

5. Objective Validity and Transcendental Truth

Since, as explained above, transcendental concepts are a specific type of pure concepts, their objective validity is of the same second-order kind as that of pure categories. If the pure categories have to be schematized in order to become empirically applicable, the same is true of transcendental concepts. It is the possibility of an empirical realization that confers a second-order objective validity on transcendental concepts, just as temporal schematism makes pure categories applicable to empirical objects. Put in terms of the principle of objective validity, Kant can formulate synthetically true judgements with transcendental concepts such as those of sensibility and understanding only if there can *possibly* be causal-psychological mechanisms that fulfil the functional requirements defined by them. Although transcendental concepts are non-empirical, their validity is still in a sense subject to the constitution of the empirical world. If there is no possible world in which the functions of sensibility and understanding could ever be actualized by appropriate causal-psychological mechanisms, then the faculty of cognition would be a mere invention, without any objective validity. Transcendental concepts such as those of sensibility and understanding are related to the empirical world indirectly through their empirical realizers, just as the pure categories become applicable to the empirical world by the mediation of their corresponding temporal schemata.

The distinction between the two orders of objective validity is very important for Kant's project, but it has rarely been discussed in Kantian literature.[17] Concepts with second-order objective validity provide the conceptual constituents for the transcendental truths that Kant's theory aims to discover,[18] and the structure of empirical realization developed above helps us to better understand the nature of transcendental truths. Although transcendental truths are supposed to make empirical truths possible, the former do in a certain sense depend on the latter. The second-order objective validity of pure categories and transcendental concepts consists in their *indirect* relation to empirical objects through the mediation of temporal schemata and concepts of appropriate causal-psychological mechanisms, respectively.

If *ex hypothesi* an indirect relation always depends on the direct relations that mediate between two indirect relata, then the second-order kind of objective validity depends on the first order in the same respect. However, this kind of dependence does not make empirical concepts or empirical truths more fundamental than transcendental ones. Consider the possibility that the course of evolution had been different and the world had never evolved *Homo sapiens* or any organisms that are capable of cognition. There would have been nothing in our empirical world that would count as an appropriate realization of the functional requirements defined by the transcendental concepts. If such an imaginary, but not unlikely, scenario had been the case, would it mean that Kant's theory of the faculty of cognition is false? Not at all. Kant's transcendental theory could be refuted by showing that it failed to identify the right set of necessary conditions of the possibility of cognition, but neither by the eventual extinction of human beings nor by the factual non-existence of all empirical cognizers. If the world had never produced any appropriately capable cognizers, such as humans, then the conditions proposed by Kant would not have been met, but this would not mean that the conditions are wrong.

Transcendental truths are not analytic, nor are they truths about a more fundamental, presumably noumenal reality that would exist behind or beyond the empirical world. If Kant's theory is successful, transcendental truths are true of the general structure of all those possible worlds in which objective cognition or experience is possible.[19] In this sense, transcendental truths are more fundamental than empirical truths, although transcendental concepts have to be mediated by their empirical realizers to become related to empirical objects. In order for any particular experience or any empirical truth to obtain, the formal structure of the empirical world has to conform to the conditions expressed by transcendental truths. Any particular experience could have been different from how it is, but if Kant's theory is largely correct, the way any experience could possibly happen varies within the framework defined by the faculty of cognition. Transcendental truths pick out a set of possible worlds whose structure allows empirical truths to obtain. It is in this sense that we must understand Kant's claim that transcendental truth 'precedes all empirical truth and makes it possible' (A146/B185).[20]

Notes

1 References to Kant's *Critique of Pure Reason* take the standard A/B form, referring to the pagination of the 1st (1781) and/or the 2nd edn (1787). English translations of the *Critique* are from the *Cambridge Edition of the Works of Immanuel Kant* (Kant 1998). References to other works of Kant give volume and page numbers of the Akademie Edition (Kant 1900–).

2 Bennett (1974) considers Kant's concept-empiricism a version of Lockean-Humean thought-empiricism, which accepts the dependence of thought on the sensible. What makes Kant different from the ordinary thought-empiricists is that he allows an independent origin of concepts due to the disparateness of sensibility and understanding. According to Bennett, the sensible not only sets the limits on what can be known (knowledge-empiricism), but also on what can be thought and understood and what makes sense at all (concept- and meaning-empiricism).

3 Kant explains it in the beginning of the Aesthetic as follows: 'In whatever way and through whatever means a cognition may relate to objects, that through which it relates immediately to them, and at which all thought as a means is directed as an end, is *intuition*' (A19/B33).

4 Kant tends to use the notion of objective reality in a stronger sense than that of objective validity. While a concept can have objective validity if it is applicable to possible objects, Kant seems to restrict the notion of objective reality to those concepts which are applicable to actual objects (Allison 1983: 134–5; Hanna 2001: 84; Guyer 1992: 125).

5 The best example is Kant's resolution of the cosmological antinomies. The thesis and the antithesis of the First Antinomy, for example, make seemingly contradictory claims about whether the world is finite or infinite in space and time, but Kant maintains that both the thesis and antithesis are false, without giving up the law of excluded middle. It appears that either the thesis or the antithesis must be true and the world would be either finite or infinite, but Kant points out that the dilemma only exists if we could make a legitimate claim about the world as a thing in itself. Yet this concept of world is *ex hypothesi* not related to any empirical object and it has no objective validity. We can talk about the world meaningfully only as the totality of all appearances, but under this concept, the world is only an *indefinite series of regress*, which can never be completed and has 'no absolute magnitude' (A521/B549). Therefore, neither the thesis nor the antithesis is true, and the principle of objective validity offers an explanation of why this does not violate the law of excluded middle.

6 Kenneth Westphal makes basically the same criticism of the verificationist interpretation (2004: 51). Nevertheless, while Westphal's concern is directed primarily to the meaningfulness of *unschematized categories*, I address a more neglected aspect of the problem, i.e. the objective validity of transcendental concepts such as those of sensibility, understanding and transcendental apperception.

7 If we confine the scope to empirical concepts or judgements, the verificationist reading of Kant's principle of significance is basically correct. Hanna puts it this way: 'Kant's theory of meaning for empirical judgments is not only truth-theoretic, but truth-theoretic in precisely the *verificationist* sense whereby, according to the middle Wittgenstein's influential remark, "the sense of a proposition is the method of its verification".' (1993: 7).

8 See Sandberg (1989: 26) and Westphal (2004: 43, 50).

9 As Michael Young points out, 'the logical form of a concept is merely that of a conjunction of one-place predicates, each of which holds of the very things of which the original concept holds' (1994: 343).

10 Compare Kant's distinction between logical and real possibility (Bxxvi, B302–3) or between logical and real ground (*Negative Magnitudes,* 2: 202; *Progress in Metaphysics,* 20: 360). Kant does speak of the logical (A147/B186, A219/B267, A350) and transcendental significance of concepts (A190/B236, A248/B305, A419/B519, A499/B527, A801/B829) in contrast to their empirical significance (A258/B313, A483/B511, A499/B527), but the *empirical–transcendental* distinction will be discussed in the next section as two sub-types of objective or real significance. Rudolf Makkreel draws a similar distinction between the logical and the objective meaning of concepts

(1990: 39–42). Hanna distinguishes between thin and thick meaningfulness (1993: 19). Young traces the difference back to the distinction between intellectual and figurative synthesis (1994: 355–7).

11 In Kant's words, 'even after abstraction from all sensible condition, significance, but only a *logical significance* [my italics] of the mere unity of representations, is left to the pure concepts of the understanding, but no object and thus no significance is given to them that could yield a concept of the object' (A147/B186).

12 Kant ascribes 'transcendental significance' to the 'pure categories, without formal conditions of sensibility' (A248/B305). The *transcendental deduction* of categories aims exactly to show the objective validity of categories, *prior to their schematization*.

13 Even according to Hanna's own formulation, the schemata and the principles should have primary, instead of secondary, objective validity: 'Some representations are objectively valid [POV] because they apply directly to objects of possible experience; but other representations, despite the fact that they do not apply directly to objects of possible experience, are nevertheless objectively valid [SOV] because they express formal transcendental conditions for the direct applicability of representations to objects of possible experience' (2001: 91–2).

14 If one identifies Kant's faculty of cognition with the human cognitive apparatus, which executes its function in spatio-temporal reality, then one cannot consistently accept Kant's metaphysical thesis that spatio-temporal reality depends on our faculty of cognition. For this reason, functionalist interpreters such as Patricia Kitcher have no choice but to reject Kant's thesis of the ideality of time (Kitcher 1990: 140–1). I have argued against the psychological interpretation in another paper (Lau 2014: 384–8).

15 As Kant explains, 'if … I leave out all intuition, then there still remains the form of thinking, i.e., the way of determining an object for the manifold of a possible intuition. Hence to this extent the categories extend further than sensible intuition' (A253–4/B309).

16 The charge of psychologism has a long history that can at least be traced back to Jacob Friedrich Fries (1828: 29). There are different forms of psychologism, and if one failed to distinguish the abstract functional requirements from their concrete realizations in humans and thus mistook Kant's faculty of cognition for the *human* cognitive system, it would hardly be avoidable to conclude, with Kitcher, that 'Kant's epistemology is clearly weakly psychologistic' (Kitcher 1990: 9).

17 Hanna makes an important contribution in spelling out the difference between the two different kinds of objective validity (2001: 92–5), but as far as I can see, his detailed analysis has not drawn much attention among Kant scholars.

18 The notion of second-order objective validity also explains why Kant cannot simply discard all metaphysical discussion based on a verificationist principle of significance. Since pure concepts may have second-order objective validity, there is a question concerning whether metaphysical concepts such as the ideas of soul, world and God might enjoy objective validity and significance via the non-empirical route. It has to be clarified whether or not metaphysical concepts belong to the necessary conditions of objective cognition and may lead to transcendental truths. This can be most clearly seen in the Paralogisms: although the Transcendental Deduction relies on the *transcendental apperception* of 'I think', which constitutes a *logical unity* of representations and must be empirically realized by psychological processes that constitute *empirical apperception* as the consciousness of one's identity *over time*, the second-order objective validity of this transcendental concept does not apply to the metaphysical concept of the thinking substance. The Paralogisms show what logical mistakes the doctrine of rational psychology has made in its inference from the pure 'I think' to the existence of a thinking substance, and in general, the Dialectic has the task of explaining in details why metaphysical concepts do not have the

second-order objective validity possessed by transcendental concepts such as those of sensibility, understanding and transcendental apperception.

19 Transcendental truths are not necessary in the sense of being true in all possible worlds; instead they are true only in those possible worlds in which experience is possible. We may follow Paul Guyer in calling the kind of necessity at which Kant's transcendental truths aim a conditional, relative or hypothetical necessity instead of an unconditional and absolute one (1987: 54–7, 121–4).

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References

Allison, H. E. (1983) *Kant's Transcendental Idealism*. New Haven: Yale University Press.

Bennett, J. (1966) *Kant's Analytic*. Cambridge: Cambridge University Press.

—— (1974) *Kant's Dialectic*. Cambridge: Cambridge University Press.

Bird, G. (2006) *The Revolutionary Kant: A Commentary on the Critique of Pure Reason*. Chicago: Open Court.

Bubner, R. (1975) 'Kant, Transcendental Arguments and the Problem of Deduction'. *Review of Metaphysics*, 28 (3), 453–67.

Fries, J. F. (1828) *Neue oder anthropologische Kritik der Vernunft*. Heidelberg: Christian Friedrich Winter.

Greenberg, R. S. (2008) *Real Existence, Ideal Necessity: Kant's Compromise and the Modalities without the Compromise*. Berlin: de Gruyter.

Guyer, P. (1987) *Kant and the Claim of Knowledge*. Cambridge: Cambridge University Press.

—— (1992) 'The Transcendental Deduction of the Categories'. In P. Guyer (ed.), *The Cambridge Companion to Kant* (Cambridge: Cambridge University Press), pp. 123–60.

Hanna, R. (1993) 'The Trouble with Truth in Kant's Theory of Meaning'. *History of Philosophy Quarterly*, 10 (1), 1–20.

—— (2001) *Kant and the Foundations of Analytic Philosophy*. Oxford: Oxford University Press.

Kant, I. (1900–) *Gesammelte Schriften*, ed. königlich preußische (later German) Akademie der Wissenschaften. Berlin: Walter de Gruyter.

—— (1992) *Lectures on Logic*, trans. J. M.Young. Cambridge: Cambridge University Press.

—— (1998) *Critique of Pure Reason*, trans. P. Guyer and A.Wood. Cambridge: Cambridge University Press.

—— (1999) *Correspondence*, trans. A. Zweig. Cambridge: Cambridge University Press.

Kitcher, P. (1990) *Kant's Transcendental Psychology*. Oxford: Oxford University Press.

Lau, C.-F. (2010) 'Kant's Epistemological Reorientation of Ontology'. *Kant Yearbook*, 2: Metaphysics, 123–45.

——(2014) 'Kant's Transcendental Functionalism'. *Review of Metaphysics*, 68 (Dec.), 371–94.

Makkreel, R. (1990) *Imagination and Interpretation in Kant: The Hermeneutical Import of the Critique of Judgment*. Chicago: University of Chicago Press.

Sandberg, E. C. (1989) 'Thinking Things in Themselves'. In G. Funke and T. Seebohm (eds), *Proceedings of the Sixth International Kant Congress* (Lanham, MD: University Press of America), vol. 2.2, pp. 23–31.

Strawson, P. F. (1966) *The Bounds of Sense: An Essay on Kant's Critique of Pure Reason*. London: Methuen.

Westphal, K. R. (2004) *Kant's Transcendental Proof of Realism*. Cambridge: Cambridge University Press.

Young, J. M. (1994) 'Synthesis and the Content of Pure Concepts in Kant's First Critique'. *Journal of the History of Philosophy*, 32 (3), 331–57.