Transcendental Idealism F.S.

FRANCES R. SHAW

TABLE OF CONTENTS

	pg
Abstract	5
Introduction	7
Preface	9
§1: An Overview Of The B Deduction	
1 Original apperception	13
2 The analytic principle of apperception	15
3 The epistemological constitution of pure apperception	17
4 Subjective versus objective unity of apperception	19
5 The objective unity of transcendental apperception	21
6 "Forms of intuition" versus "formal intuition"	22
7 Conclusions from the B deduction overview	23
§2: The Two-Step Argument Of The B Deduction	
1 An overview of the two step deduction	26
2 Preliminary discussion of the sensible application of the categories	28
3 The argument of §24	30
4 The argument of §26	
i) Apprehensive synthesis implies the categories	33
ii) A priori forms of judgment versus a priori judgment	35
iii) Pure intuition implies the categories	36
iv) Kant's two perception arguments	39
5 Conclusions from the two-step deduction	42
6 A retrospective view of the two-step deduction	46
7 The relation of the categories to the logical forms of judgment	48
§3: The Categories As <i>A priori</i> Thought Versus The Categories As <i>A priori</i> Knowledge	
1 §10 as approached from the Aesthetic; and Introduction to the Schematism	50
2 Quantitative versus qualitative unity of the categories	51
3 The necessary unity of time as grounded in the qualitative unity of the categories	52
4 Both the qualitative and quantitive unity of the categories, in one united	
self-consciousness, are required for synthetic a priori judgments	53
5 The externality versus Internality of intuition to the understanding	55
6 Two aspects of both the subject and space and time are required	56
7 Apperception through the categories as both ontology and epistemology	58
8 Direct and indirect perception/apperception of objects as answer to the sceptic	60
9 The nature of Kant's "necessary unity of self-consciousness"	61
10 The necessary unity of self-consciousness as the necessary unity of judgment	62
11 Transcendental will as a necessary aspect of the objective unity of apperception	64
12 Our pre-reflective consciousness of ourselves as embodied subject - as	

conceptual rather than non-conceptual	67
13 The "mind-independence" of objects of experience	70
14 The thing in itself as a transcendental element in experience itself	71
15 A metaphysical objective unity of apperception as 'My Kant's necessary unity	
of self-consciousness	73
16 The rationale of the two-step deduction	75
17 The priority of the categories to pure intuition	77
18 The possible grounding of the "Original Synthetic Unity of Apperception" in the	
categories	78
A synopsis of my reading of the B-deduction	80
Conclusion	85
Bibliography	98

Abstract

In this paper I present an interpretation of Immanuel Kant's transcendental deduction of the categories, based primarily on the "two-step" argument of the B deduction of the *Critique of Pure Reason*. I undertake to show that Kant's distinction between the "pure forms of intuition" and "pure formal intuition" is successful in its attempt to prove that all sensible intuitions presuppose the *a priori* categories, in a way which is compatible, I claim, with Kant's statements (in the Aesthetic and elsewhere) that sensible intuition is prior to all concepts; and therefore that the Transcendental Aesthetic presupposes the Transcendental Analytic.

Thus my Interpretation is a "conceptualist" reading of the deduction, in holding that perception, as receptivity, presupposes an underlying spontaneity of the pure understanding and categories. The categories are held to be not just compatible with all possible sensible intuitions, but through their "transcendental content" constitutive of the relation of sensible intuitions to objects - and this explains how our thought can represent objects *a priori*. It is one of the claims of my interpretation that the logical forms of judgment of general logic derive from the pure categories of transcendental logic, rather than vice-versa. I.e. that the logical forms through which we make empirical judgments by combining analytical concepts in inner sense in time, are originally grounded in an atemporal categorial synthesis in pure intuition (i.e. in the form of time but not the dimension of time), referring an outer intuition in general to the transcendental object of intuition (as "something in general" outside sensibility or receptivity), thereby providing the synthetic unity of the manifold which "..all analysis presupposes."

My conceptualist reading of the deduction, I claim, avoids the problems associated with other conceptualist readings, for example inconsistency with the text ("Intuitions are prior to all concepts." etc.) and blurring of the distinction between receptivity and spontaneity. In my paper I prove that the categories can correctly be held to provide the *a priori* unity of intuitions, notwithstanding the fact that the latter are "prior to all concepts," because this unity is not provided by the categories as fully-fledged concepts in the empirical subject, but as the transcendental logical form of these concepts, as a unity in the pure understanding - and the categories therefore require their empirical content or application for their objective reality as concepts. I.e. the categories, as logical functions of judgment for transcendental apperception, in the pure forms of intuition, are prior to all "concepts", correctly speaking, as well as prior to all intuitions, and provide the necessary unity of both.

Likewise, at the empirical level my version of conceptualism cannot be accused of blurring the distinction between receptivity and spontaneity, or sensibility and understanding, because although the transcendental content of the categories, as a logical function of judgment in the pure forms of intuition, in transcendental apperception, is in necessary relation to sensibility (in combining the manifold in the pure or formal representation of the transcendental object) their empirical content is not. - At the empirical level the divide between spontaneity (as judgment in the empirical subject) and receptivity (as the effect of transcendental synthesis and the transcendental object on outer and inner sense) remains intact.

Conceptualist readings of the deduction also have to avoid infringing Kant's requirement that the sensible manifold originally be given prior to and independently of all acts of the understanding, or otherwise to qualify the requirement in some way - e.g. by taking a Hegelian direction, such as that taken by John McDowell. On my reading of the deduction the sensible manifold given indeterminately in the pure forms of space and time must be given prior to the categorial synthesis of the manifold in the pure representation of the transcendental object, i.e. in the pure 'concept' of an object in general affecting sensibility. Therefore

¹ E.g. in "On Pippin's Postscript." European Journal of Philosophy 15:3 pp. 395-410.

Kant's requirement for an undetermined manifold given prior to, and independently of, all acts of the understanding ("..the manifold to be intuited must be given prior to the synthesis of understanding, and independently of it. How this takes place, remains here undetermined" [cf.B145/146]) is not infringed. In a later section of the paper, however, I will argue that the transcendental object (of intuition) does have pure theoretical reason as one of its two interacting immanent aspects, but is distinct from pure theoretical reason in the other of its (the transcendental object of intuition's) two interacting immanent aspects, i.e. pure will, which adds a Schopenhauerian element to my interpretation (which will be argued for in a way which supports Kantian optimism over Schopenhauerian pessimism however, in regard to the freedom of the will).

Another perceived inconsistency in the deduction, which my interpretation can explain, is Kant's description (in the B deduction) of the principle of the necessary synthetic unity of apperception as analytic, while in the A deduction it is described as synthetic. I explain this as a difference in the reference of terms such as "my representations" in the two versions - a transcendental reference in the B version but an empirical *and* transcendental reference in the A version of the principle. I also show that the first part of the two-step B deduction can correctly be characterised by Kant as analytic and the second, concluding part, synthetic (a point of dispute amongst Kant scholars) because transcendental logic (which refers to both the analytic and synthetic aspects of the principle of apperception) "does not abstract from the pure content of knowledge."

While being a "double aspect" rather than "two world" view of transcendental Idealism (because objects of intuition are comprised of both the empirical and transcendental object, i.e. transcendental referent, of intuition, my view differs significantly from the "double aspect" interpretation of Henry Allison (which distinguishes empirical reality from the "God's eye" view). The view of transcendental idealism resulting from my reading of the deduction, I claim, allows a full empirical realism, because empirical intuitions, as objects of cognition, are the appearance of both the transcendental subject and the transcendental object (i.e. transcendental referent) of transcendental synthesis (both as "something in general" outside sensibility or receptivity, or rather outside sensibility as receptivity).

I conclude that Kant succeeds (although only with the addition of what I have called my 'Schopenhauerian element') in his attempt to prove that we have a transcendental unity of apperception which both constitutes, and is constituted by, the relation of sensible representations to objects, and that since transcendental apperception is the *a priori* underlying ground of empirical apperception, the categories (as the logical functions of judgment by which transcendental apperception relates sensible representations to objects) are the *a priori* underlying ground of all experience, and are therefore valid synthetically *a priori* for all objects of experience.

INTRODUCTION

Unlike standard readings of Kant's transcendental deduction of the categories, most of which ground the rule-governed combination of the sensible manifold on our consciousness of self-identity, and/or on the "accompaniment" of the manifold by the "I think," my view is that Kant can only be understood as grounding both the combination of the sensible manifold and the unity of apperception on the unity of a transcendentally thinking (and universal) subject with a necessary relation to sensibility, which combines the given sensible manifold **as one thought,** rather than through the accompaniment of thought.

I can claim support for this interpretation from Wolfgang Carl, who in "Kant's first drafts of the deduction of the categories" likewise concludes that Kant (at least in one of the earliest drafts of the deduction) presents the thinking subject, rather than the subject that thinks, as the ground of the unity of both apperception and the sensible manifold. Carl calls this "The ontological foundation of the rule-connectedness of our representations." Kant states: "The condition of any apperception is the unity of a thinking subject; from that comes the connection (of the manifold) according to a rule" (R4677 5 19;651, 13- 15). Carl points out that this can be interpreted in two ways, depending on the reference of "from that." The phrase can refer to the entire preceding sentence. In that case Kant claims that the unity of the subject as the condition of apperception allows the connection of the manifold according to a rule. Because of that condition apperception is consciousness of an identical self, and the thesis Kant wanted to put forward would amount to something like this: consciousness of an identical self implies that representations will be connected according to a rule. Carl calls this thesis "The epistemological foundation of such a connection." In other words the subject expresses it's own unity in the unity of the given.

"But one can also read the sentence in another way: 'from that' may refer to the unity of the thinking subject. In that case the connection of the manifold according to a rule would be founded on the unity of the thinking subject. Because of that unity the representations must be connected in a certain way. I call this 'The ontological foundation of the rule-connectedness of our representations,' because the unity of the thinking subject is taken as the basis for the connection." Carl concludes, from the arguments of the early drafts, that this is the correct interpretation of the sentence, and therefore indicates one of Kant's earliest intentions for the deduction of the categories. Carl maintains that Kant's arguments in this early draft are largely unsuccessful, however. In the present essay I am putting forward my own "ontological" interpretation of the final versions of the deduction. My initial claim is that such an interpretation provides a consistent and valid reading of the complex arguments in the transcendental deduction of the categories. I will therefore not be claiming any confusion on Kant's part in defence of my arguments. I am assuming that an interpretation which makes no claims of confusion or inconsistency on Kant's part is to be preferred over those which abound in such claims. My further assertion is that on this reading of the deduction the remainder of Kant's much criticised transcendental philosophy at once falls into place as lucid and plausible (if poorly and ambiguously expounded at times; the transcendental deduction itself providing only the bare skeleton of an argument).

Kant's deduction of the categories, I claim, will only count as valid if it can prove that in outer experience we have knowledge of "weighty" objects external to ourselves. Part of my strategy will be to interpret Kant's "We can only know things as appearances." as "We can only know things under certain descriptions." E.g.

Kant's assertion that our knowledge of physical objects in space and "thinking beings" in time is only a knowledge of appearances means, in a very complex sense, "We can only know things under the description of physical objects in space and thinking beings in time."

My arguments for this ontological reading will focus on the B-version of the Transcendental Deduction, which seems to me to give a tighter logical argument than the A-version (this ontological reading will however presuppose Kant's deduction of the categories as it is presented in the A-version). A main focus of my analysis will be on the controversial "two-step" argument from §20 to §26, which utilises the important "form of intuition"/ "formal intuition" distinction regarding the pure intuitions of space and time.

Although my reading of the deduction grounds the unity of both apperception and the sensible manifold on the unity of the pure understanding, my reading nevertheless differs radically from that of Henry Allison, who does likewise, but who equates Kant's "original synthetic unity of apperception" (the ground of all unity) with the "I think" of the cognitive subject, in unifying the sensible manifold through judgments. He thereby sets the scene, in my opinion, for a misunderstanding of the deduction as a whole, as well as the transcendental idealism which underlies it. Allison's identification of original apperception with the "I think" (of empirical apperception), transcendental apperception with objective apperception, and the objective unity of judgments with objectively valid judgments leads, in my view, to the various problems he encounters with the deduction; for example his difficulties in explaining the "subjective" empirical unity of apperception, and the tension he finds between the *Critique*'s view of judgment and that of the *Prolegomena*. By recognising subtle distinctions in Kant's text which are overlooked by Allison, and other Kant commentators, these purported shortcomings of the deduction can be avoided, and a more robust view of transcendental idealism can be presented.

In my view, although the argument of B132 (which Allison holds is the basis for the first step of the deduction) begins with the synthetic unity of consciousness provided by the possible accompaniment of the sensible manifold by the "I think," the latter can only accompany the sensible manifold in so far as it is already given as a unity - and presupposes an original synthetic unity of consciousness (that is, an original "I think") for the combination of the undetermined manifold, through a necessary relation between sensibility and understanding (which in my view is the basis for the first step of the deduction).

As the interpretative stance taken in this essay will rely on a strict parallel between the synthetic *a priori status* of Euclidean geometry (which has been considered invalidated by modern physics and geometry) and that of the pure concepts of the understanding (as they apply to space & time), on my reading of the deduction the synthetic *a priori* validity of the latter will stand or fall along with that of the former. In the light of Einstein's theory of General Relativity, according to which Euclidean space is the subjective appearance of an objective non-Euclidean "space-time," I contend that a similar "space-time" can be extrapolated from Kant's own arguments - the objective synthesis of nature which takes place in the pure forms of both space and time, as the *a priori* underlying ground of Euclidean space, but which is not itself Euclidean (e.g. it is four-dimensional rather than three-dimensional). In Kant's "Transition to physics" in his final work, the "*Opus postumum*," this objective space-time synthesis is in fact identified as the formal "object in itself" of physics which affects us empirically. Thus rather than being refuted by modern geometry and physics, in my view Kant's is the only philosophy (at least in my expansion of it) showing promise in having the tools available to make Einstein's space-time and relativity theories (and I would add to that quantum mechanics) intellectually (rather than just mathematically) comprehensible.

PREFACE

1. The Transcendental Deduction of the Categories

Dieter Henrich pointed out in his 1968 paper on the proof structure of Kant's transcendental deduction, that this deduction has preoccupied interpreters more than any other text in the history of philosophy. In response to Henrich's own paper, the proof-structure of the first and second edition versions of the deduction has been an area of continuing debate, particularly in regard to the "two-steps-in-one-proof" structure of the second edition version, which Henrich suggested as a criterion for a successful interpretation. There is also continuing debate about whether or not the first and second edition versions of the deduction express the same argument, and which version is the most successful.

The immediate understanding of the Transcendental Idealism on which Kant grounded his deduction of the categories was (and still is) the "two-world" view - non-spatial atemporal "noumena" are the unknowable ground of the sensible objects we have knowledge of in space and time. As Kant held that space and time are *a priori* sensible forms of our knowledge rather than independent realities, our knowledge of causal substance in space and time through the *a priori* categories is only a knowledge of appearances, not of the things in themselves independent of us.

A more recent "two-aspect" view of Transcendental Idealism holds that the appearance in space and time, which constitutes "empirical reality," and the thing in itself (as the "God's eye" view), are two different ways of considering the same object, rather than two different kinds of object. Controversy continues over which view best reflects Kant's text. Both views have been subjected to intense scholarly criticism.

Kant termed his theory a "Copernican revolution," as it holds that objects must conform to our knowledge rather than vice versa as was previously thought. Debate is ongoing as to whether this is achieved through the objects of our knowledge being brought into our mind or our mind being broadened into a universal one containing all empirical subjects and objects within it (which can itself be regarded as either a two-world or two-aspect view in relation to its own possible grounding in a transcendent noumenon).

Another area of controversy is whether Kant's theory of space and time as pure intuitions can now be discounted, in the light of modern developments in physics and mathematics, which have been claimed to rule out an *a priori* space and time. - Likewise with the *a priority* of the causal laws of matter, in the face of the indeterministic laws of Quantum Mechanics.

Kant's arguments in the transcendental deduction also feature in debates in the contemporary philosophy of perception, in relation to conceptual versus non-conceptual content; Kant's arguments being cited in support of both sides of the debate, which also extends to the non-conceptual versus conceptual content of our bodily presence in space, and as to whether and in what sense the categories must be prior to intuitions, as some readings of the deduction (including my own) require, but other readings, such as Wayne Waxman's, deny.

The question as to why this topic is worth researching is not a difficult one. Kant's transcendental deduction of the categories provides the main justification for his critical philosophy as a whole, and was considered by him as containing the most important, although also the most difficult, arguments of his *Critique of Pure Reason* (on which his reputation as a great philosopher is largely based), arguments of

which he considered himself justly proud.

However in spite of the ever-increasing attempts at interpreting the deduction over the last 200-odd years, no interpretation has yet been able to present it as a valid argument, leading to the groundbreaking conclusions Kant claimed for it. - For Kant claimed that he had set forth a metaphysics of nature as a science, whose general principles would be valid for all time. A science which almost at one stroke solved all the major philosophical problems of the past, through a revolutionary merger of rationalism and empiricism.

Although recognised as having inestimable influence, Kant's transcendental deduction of the categories is generally considered to be at best only partially successful, apparently containing areas of confusion on Kant's part, and his philosophy of Transcendental Idealism itself as something to be eradicated from the deduction if at all possible (as in Peter Strawson's influential version, which argued that Kant's transcendental deduction could provide a sound argument from subjective experience to objective reality without its unfortunate grounding in Transcendental Idealism).

My aim is rather to provide a strict textual interpretation of Kant's deduction, as the only way of forming an overall assessment of its validity. As the text of the transcendental deduction provides only a bare skeleton of an argument, my claim is that its apparent inconsistencies can be accommodated in a wider perspective than has so far been taken. My view is that although Kant's arguments can be very confusing, owing to their extreme difficulty, this does not mean that Kant himself was confused.

As there is still no consensus among scholars as to the overall merit or proof structure of the transcendental deduction, in spite of the two centuries of debate surrounding it, and as the one thing which commentators do agree on is that Kant held that the categories originally derive from the logical forms of judgment, my suggestion is that a "Copernican revolution" be performed in relation to Kant interpretation itself. I.e. the logical forms of judgment of general logic originally derive from the categorial functions of transcendental logic.

Kant's characterisation of the categories as logical functions of judgment has always been considered suspect among Kant scholars, and my claim is that by understanding the categorial syntheses, through which our intuitions refer to objects, as themselves being the original logical functions of judgment, the transcendental deduction of the categories can be made comprehensible. In my thesis I will attempt to show how this strategy can resolve many of the ongoing debates in Kant scholarship.

My goal is to prove that Kant's deduction can even now do all that it promises to do. In the second half of my thesis I will argue that this will rely on the transcendental object of intuition being identified (in part) with an immanent transcendental will, which I see as a requisite for the success of the transcendental deduction. Therefore I will be considering Kant's views on the embodied subject, as well as his reference to the "moving subject" in the *Opus postumum*, which was needed to "fill a gap" in his Critical system.

2. Kant's 'Transcendental object' as transcendental will

On standard readings of the *Critique of Pure Reason* the concept of an object in general, through the *a priori categories*, derives from the apprehensive imagination's "pure synthesis" of space and time (themselves pure subjective sensible intuitions rather than independent realities) and the logical forms of judgment of general logic, by which empirical intuitions are thought determinately in space and time for empirical judgment. Only subsequently is this concept of an object in general referred to an un-intuitable "transcendental object" outside the given intuitions in space and time, as their unknowable objective ground,

or the "thing in itself." This brings an immediate obscurity into Kant's thesis - which states that the pure concept of the transcendental object is needed for objectivity, in relating all our empirical concepts in general to an object. But it is difficult to see where any genuine objectivity can come from on this account.

Attempts by commentators to make sense of Kant's objectivity claims within the above framework have met with little success. - From Henry Allison's "two-aspect" epistemic view of transcendental idealism, in which space and time and the categories are "epistemic conditions" with no idealistic or realistic implications about the nature of the objects known, as things in themselves rather than as appearances; to the "two-world" ontological view, according to which the only real objects are the independent transcendent "noumena" purportedly affecting our sensibility, which can only provide objectivity by giving a problematic objective grounding to our knowledge. These and other attempts at reading objectivity into Kant's arguments on the standard interpretations fall far short of Kant's objectivity claims in relation to the objects of our experience, and the metaphysics of nature as a science.

Schopenhauer attempted to restore objectivity to the external world, within the above framework, by taking his cue from Kant's hint (in arguing against a necessary dualism of mind and body at the level of the thing in itself) that substance may in itself be will. Thus in the case of the human being the same thing which thinks can be a physical body in space. Which implies that all substance in itself may conceivably be the subject of a consciousness, and have its own inner sense (notwithstanding that inner sense is in time and therefore an appearance, which must itself rest on an unknowable substrate outside both space and time). - Schopenhauer accordingly put forward a metaphysics of a universal atemporal will, which expresses itself in both organic and inorganic nature, and at its most general is a spontaneous striving force, which we know within ourselves as will.

Thus through subjective knowledge we can know the inner nature of reality - which is inaccessible to objective knowledge and science, Schopenhauer claimed, and he bitterly criticized Hegel and Fichte for doing away with Kant's most profound discovery - the distinction of the appearance from the thing in itself.

In my view the success of Kant's transcendental deduction of the categories does rely on Kant's transcendental object being identified with an immanent transcendental will. My reasons for this are different from Schopenhauer's however; the objectivity of the external world can be delivered up by the transcendental deduction, on my view. - The "metaphysical deduction" of the categories does indeed imply that the categories and concept of an object in general derive from the imagination's pure temporal synthesis of space and time, accompanied by the logical forms of judgment. But this is because the metaphysical deduction starts with the pure intuitions of space and time. The transcendental deduction, however, proves that the pure intuitions of space and time, and the empirical subject, presuppose an original transcendental synthesis through the categories, in the pure representation of the transcendental object. Thus the empirical application of the categories, as epistemology, is only the analogue of their transcendental application, as ontology.

Thus the objects perceived in space and time, by the empirical subject, are the appearance of both transcendental synthesis and its transcendental object - and therefore do provide objectivity in my view. The transcendental syntheses through the categories, as "pure synthesis represented universally," are atemporal syntheses in the pure forms of space and time, which at the same time determine the unity of empirical consciousness, and provide for the synthetic *a priori* judgments which make metaphysics possible as a science.

Thus the validity of the transcendental deduction does not appear to depend on the specific nature of the transcendental object of our intuitions. However I will argue that the identification of the transcendental object with transcendental will is presupposed by the transcendental deduction insofar as it contains objective reality, and is in fact required for our pure intuition of space. In the first Critique Kant does not see the need to specify whether the transcendental object is "in us" or "outside us" or whether it "would be removed with the removal of sensibility, or in the absence of sensibility would remain" etc. Thus empirical intuitions, as objects of cognition, refer indirectly to the transcendental object whether it is completely independent of us or is our own transcendental imagination in a different guise.

In the *Opus postumum*, however, Kant realised that the transcendental object had to be explicated as an aspect of the transcendental subject, since pure theoretical reason "inserts" empirical laws into nature, and therefore interacts with the material conditions of experience. This led him to his thesis of a force plenum - "ether" - as a necessary material condition of experience. I will interpret this thesis as putting forward one universal unknowing subject of will as the inner nature of all matter - imperceptibly filling all space and time, which can be determined both from without by transcendental synthesis, and from within by the purposive will of organisms. - This gives moving forces in space and time which are a co-ordination of transcendental synthesis and transcendental will, and objective reality to the unity of practical and theoretical reason - rather than the subjectivity of the *Critique of Judgment*'s "transcendental principle of judgment".

Thus in my view Kant's legacy can only be fully appreciated when the arguments of the *Opus* postumum are taken into account, and the Kantian philosophy seen as a transcendental rather than transcendent position on the thing in itself.

I will begin this paper with an overview of the B-Deduction. This will be followed by a more systematic approach, through an analysis of the "two-step" argument from §20 - §26 of the B-deduction.

§ 1 : AN OVERVIEW OF THE B DEDUCTION

1. Original Apperception

Kant states, in a passage which marks the generally accepted beginning of the B-deduction:- "It must be possible for the 'I think' to accompany all my representations; for otherwise something would be represented in me which could not be thought at all, and that is equivalent to saying that the representation would be impossible, or at least would be nothing to me" (B132). That is, to call something "my representation" means that I must be able to combine it with other representations in one united knowledge, through the "I think," as the unity of the "I" in relation to the given representations can only be experienced **as a unity** through the subject's own act - of uniting the representations comprehensibly in one consciousness. Therefore the unity of "my" consciousness containing "my" representations requires that all the representations be accompaniable by the "I think."

Thus the empirical unity of self-consciousness is a unity of my representations in inner sense in time which can be accompanied by empirical thought. For example, our sensible perceptions in outer sensible intuition are comprehended, through accompaniment by the "I think," as determinations of the subject in inner sense in time, through which we have indirect knowledge of outer objects in an objective space.

However, after thus asserting that all "my" representations must be accompaniable by the "I think," Kant now goes on to say "That representation which can be given prior to all thought is entitled intuition." Thus intuitions given as a unity in outer intuition in space are already experienced as "my representations" (of objects), and therefore as conformable to the "I think," prior to all thought.

Therefore, says Kant, all the manifold of sensible intuition has a necessary relation to the "I think" in the same subject in which this manifold is found. - If sensible intuitions were only contingently conformable to the "I think" they could not be experienced as "my representations" prior to all thought. It has been stated above that the condition for the unity of consciousness is that all representations are accompaniable by the "I think," and therefore if sensible representations were only contingently accompaniable by the "I think" we would have only a contingent unity of consciousness. But as intuitions can be experienced as my representations prior to all thought, and therefore as necessarily conformable to the "I think," we have a necessary unity of consciousness, with a necessary relation between sensibility and understanding. However as this necessary relation of sensible intuitions to the "I think" is experienced as such prior to all thought, "this representation" (i.e. the necessary relation of sensibility to the "I think") cannot be regarded as belonging to sensibility - it involves the spontaneity of the subject, that is the understanding, in experiencing the manifold sensible representations as "my representations" prior to all thought.

But as this necessary relation of sensibility to the "I think" **is "prior to all thought"** and is "that representation which cannot be accompanied by any further representation, although itself generating the 'I think' which must be able to accompany all other representations" (B133), this necessary relation of sensibility to the "I think" cannot consist in my accompanying the sensible manifold with an act of pure understanding, prior to accompaniment by the empirical understanding.

In our experience, however, there are two possible ways in which phenomena can be presented as "my representations." They can be "my representations" because they are in a sensible unity in inner sense in

time *accompaniable* by the "I think," or they can be "my representations" because they are combined together in one act of thought, as, for example, words in a sentence which together make up one proposition. In my view Kant intends the latter as the manner in which sensible intuitions are presented as "my representations" prior to my empirical self-consciousness in inner sense in time. That is, this necessary relation of sensible intuition to the "I think" must involve the spontaneity of a pure understanding, which unites the sensible manifold in an act of pure or formal thought, which is prior to all empirical thought, and is a necessary underlying aspect of perception itself. In other words sensibility provides the material aspect of this transcendental thought and pure understanding provides it's formal aspect.

Therefore the pure understanding in its necessary relation to sensibility must combine the sensible manifold in conformity with empirical thought, in a pure act of synthesis which constitutes the unity of self-consciousness containing "my representations" prior to my empirical self-consciousness in inner sense in time. Kant consequently calls this pure act of combination "pure apperception" to distinguish it from empirical apperception.

But this pure combination of the sensible manifold through pure apperception, as it contains the consciousness of the *synthetic* unity of the manifold (that is, its combination in a representation of the object), must, as an *a priori* synthetic unity, be a combination in general prior to all other combination. This consciousness of the synthetic unity of the manifold, Kant points out, must precede all concepts of unity, thought through categories or logical functions of judgment in the empirical subject, in which combination is already thought. (In other words, which are applied to intuitions already given as a unity.) Instead, this pure concept of the synthetic unity of the manifold must itself, Kant holds, provide the *a priori* ground of the unity between diverse concepts in judgment, and is therefore the ground of the possibility of the understanding itself, even in its logical employment (cf.B131).

Kant also calls this necessary unity of self-consciousness "original apperception," because (to complete an earlier quote) "It is that self-consciousness which, while generating the representation 'I think' (a representation which must be capable of accompanying all other representations and which in all consciousness is one and the same), cannot itself be accompanied by any further representation" (B132/133). Thus pure apperception is prior to and makes possible all other unity, including that of time itself as an intuition. This implies, which is not made explicit in Kant, that the transcendental unity of apperception in its most general combination of the sensible manifold is atemporal, as it cannot take place in time as a dimension but only in the pure form of time, as the *a priori* underlying ground of all empirical time.

Looking again at Kant's statement that "all the manifold of sensible intuition has a necessary relation to the 'I think' in the same subject in which this manifold is found," it can be seen that "the same subject" is the subject which contains the pure forms of space and time, before they are unified as intuitions. Thus not in the empirical subject that thinks in inner sense in time and stands in relation to outer intuition in space, because the pure forms of space and time are not yet unified as outer and inner intuition. Therefore the pure understanding, as original apperception, can only combine the sensible manifold by thinking in the pure forms of both time and space, rather than by thinking in inner sense in time about the form and content of outer intuition in space. That is, the pure understanding does not unify the manifold of outer intuition by thinking about outer intuition, but by thinking in, or with, outer intuition.

And it is this transcendental thinking in the pure forms of both space and time through original

apperception which grounds our empirical knowledge of objects. That is, Kant's contention is that the synthetic unity of consciousness is not merely a condition I myself require in knowing an object, but is a condition under which every intuition must stand in order to become an object for me. "For otherwise, in the absence of this synthesis the manifold would not be unified in one consciousness" (B138). That is, without synthetic unity the representations would not be combined together as "my representations" in one unified intuition which could become the object of my empirical thought. To be an object of thought or comprehension presupposes a prior comprehensible unity, and without synthetic unity there would be no comprehensible unity to be comprehended. Nor can it be claimed that without synthetic unity the manifold sensible representations, although not in a comprehensible unity in outer intuition as the representation of an object, would still be "my representations" (accompaniable by my thought) in inner sense in time, as this also, Kant argues (in §26), would be impossible without the synthetic unity of the manifold in outer intuition in space, which is also required for the unity of inner intuition in time.

2. The Analytic Principle Of Apperception

Thus the synthetic unity of consciousness, states Kant, "is an objective condition of all knowledge" (B138). Kant holds that although this proposition makes synthetic unity a condition of all thought, it is itself analytic "for it says no more than that all my representations in any given intuition must be subject to that condition under which alone I can ascribe them to the identical self as *my* representations, and so can comprehend them as synthetically combined in one apperception through the general expression 'I think'" (B139).

That is, all my representations in any given intuition must have synthetic unity if they are to be comprehended by the "I think." This proposition is analytic, however, because to say that all "my" representations must have synthetic unity is to say they must be subject to that very condition under which I have already ascribed them to the identical self as "my" representations, i.e. the condition that they are combined synthetically in one apperception through the necessary relation of sensibility to the "I think," prior to all thought.

The analytic unity of consciousness ("I am I"), says Kant, "presupposes a certain synthetic unity (B134). That is, the unity and identity of my consciousness containing "my" representations implies the possible synthetic unification of the representations in one apperception through the one "I think," a combination which, in pure apperception, **constitutes the unity of the representations as "my" representations**. Therefore it is an analytic principle in pure apperception that all "my representations" in a given intuition are in a synthetic unity of consciousness.

Kant's argument for the apperception principle starts with the empirical unity of apperception: - all my representations in inner sense in time must (contingently) be accompaniable by the "I think," otherwise I could not call them "my representations"; and because sensible intuitions can be experienced as my representations prior to all thought, and therefore as necessarily conformable to my thought, it leads to pure apperception - through which all the manifold of sensible intuition is combined in one transcendental self-consciousness, through a necessary relation of sensibility to the "I think." Which implies the analytic principle that all my representations in any given intuition must have synthetic unity, as the ascription of sensible intuitions to my identical consciousness, as "my representations," prior to all thought, presupposes their synthetic unification through pure apperception.

Kant's statements about the analyticity of the principle of the synthetic unity of apperception, along with other similar sounding statements in the A deduction apparently asserting the synthetic nature of the same principle, has led to much critical debate amongst Kant scholars concerning the correct status of the principle, and the consequent affect on the validity of Kant's arguments. However it seems to me that the analyticity or otherwise of the principle of apperception depends on whether certain terms in the proposition have a transcendental or an empirical reference; that is, on whether the phrase "my representations" refers to representations of my empirical self-consciousness or representations of my transcendental self-consciousness.

Thus the fact that sensible intuitions can be experienced as a unity in consciousness, that is as "my representations" prior to all thought, implies a pure understanding with a necessary relation to sensibility, which combines the sensible manifold into a synthetic unity in transcendental self-consciousness. This entails the *analytic* proposition that all intuitions as my representations in transcendental consciousness have synthetic unity, in conformity with the "I think," and the *synthetic* proposition that the same intuitions as my sensible representations in empirical consciousness have synthetic unity in conformity with the "I think" (through the effect of transcendental synthesis on inner sense). That is, the empirical consciousness of the given intuition is "...subject to a pure self-consciousness *a priori*" (B144).

Kant's assertion that the proposition which "makes synthetic unity a condition of all thought ...is, as already stated, itself analytic," because "[I]t says no more than that all my representations in any given intuition must be subject to that condition under which alone I can ascribe them to the identical self as my representations, and so can comprehend them as synthetically combined in one apperception through the general expression 'I think'" (B138), can be compared with the assertion in the A-deduction claimed by Kant scholars to contradict it - "The synthetic proposition, that all the variety of *empirical consciousness* must be combined in a single self-consciousness, is the absolutely first and synthetic principle of thought in general"(A117fn.). It can be seen, in relation to the above discussion, that the former describes an analytic principle because it refers to the synthetic unity which pure self-consciousness prescribes to itself, whereas the latter describes a synthetic principle because it refers to the synthetic unity which pure self-consciousness prescribes to empirical consciousness.

The reason Kant sees the unity and identity of self-consciousness as grounded in transcendental apperception is that only pure apperception can provide one continuous synthesis of experience and therefore one identical subject of consciousness. Self-identity cannot be grounded in empirical consciousness, which accompanies different representations, and:

.. is in itself diverse and without relation to the identity of the subject. That relation comes about not simply through my accompanying each representation with consciousness, but only in so far as I *conjoin* one representation with another, and am conscious of the synthesis of them. Only in so far, therefore, as I can unite a manifold of given representations in *one consciousness*, is it possible for me to represent to myself the *identity of the consciousness in (that is, throughout)* these representations. In other words the *analytic* unity of apperception is possible only under the presupposition of a certain *synthetic* unity.

The thought that the representations given in intuition one and all belong to me, is therefore equivalent to the thought that I unite them in one self-consciousness, or can at least so unite them;

and although this thought is not itself the consciousness of the *synthesis* of the representations, it presupposes the possibility of that synthesis. In other words, only in so far as I can grasp the manifold of the representations in one consciousness, do I call them one and all *mine*. For otherwise I should have as many-coloured and diverse a self as I have representations of which I am conscious to myself. Synthetic unity of the manifold of intuitions, as generated *a priori*, is thus the ground of apperception itself, which precedes *a priori* all *my* determinate thought. Combination does not, however, lie in the objects, and cannot be borrowed from them, and so, through perception, first taken up into the understanding. On the contrary, it is an affair of the understanding alone, which itself is nothing but the faculty of combining *a priori*, and of bringing the manifold of given representations under the unity of apperception. The principle of apperception is the highest principle in the whole sphere of human knowledge (B134-5).

3. The Epistemological Constitution Of Pure Apperception

Thus not only is pure apperception the necessary ground of all thought, and of the subject's awareness of self-identity, it also enables us to have knowledge of objects, as it is a pure active unity of self-consciousness, which combines sensibility in the pure or formal concept of the object affecting it, and is thereby the *a priori* underlying ground of all our knowledge of objects as appearances. Just as our empirical concepts of objects rest on the logical forms of judgment in the empirical understanding, the pure concept of an object in general, thought in the pure forms of space and time, also rests on pure functions of judgment, that is, the *a priori* categories. The latter, as the ground of all unity, also ground the unity of time as an intuition rather than as a mere form of intuition, and therefore the pure categories must be atemporal. Thus, as referred to above, the synthetic unity of apperception at its most general is an atemporal act of the pure understanding, which unites sensibility in a formal concept of the object affecting it. The pure categories are therefore an atemporal "original acquisition" (cf "A discovery", A.K,221-3), arising from this original act of unifying sensibility in a concept of the object in general affecting it. And as the original ground of all unity the categories must also be the ground of the related logical forms of judgment, through which we make *a posteriori* or *a priori* analytic judgments in inner sense in time.

Kant holds that the pure categories can be abstracted from our sensible intuition, as original functions of judgment for any imagined discursive understanding (for unifying its sensibility in the concept of the object affecting it) because the principle of the original synthetic unity of consciousness, on which all our knowledge of objects is based, is completely independent of all conditions of sensible intuition (cf.B138).

Kant states that the "supreme principle" of the possibility of all intuition, in its relation to understanding, is therefore that all the manifold of intuition should be subject to conditions of this original synthetic unity of apperception, which combines the sensible manifold in general in a concept of the object (cf.B137). For without such combination nothing can be thought or known, since the given representations would not have in common the act of the apperception "I think," and so could not be apprehended together in one self - consciousness:

Understanding is, to use general terms, *the faculty of knowledge*. This knowledge consists in the determinate relation of given representations to an object, and an *object* is that in the concept of which the manifold of a given intuition is *united*. Now all unification of representations demands

unity of consciousness in the synthesis of them. Consequently it is the unity of consciousness that alone constitutes the relation of representations to an object, and therefore their objective validity and the fact they are modes of knowledge, and upon it rests the very possibility of understanding" (B137).

This passage has caused considerable perplexity amongst Kant scholars, as they see it as committing a gross non-sequitur. - Kant has proven that the original synthetic unity of consciousness is at most a necessary condition for the relation of sensible representations to an object, not also a sufficient condition, and therefore constitutive of the relation of the representations to an object. However there is no problem on my interpretation, according to which the transcendental unity of consciousness is a sufficient condition for the relation of sensible representations to an object, as transcendental consciousness must unite the sensible manifold in a pure concept of the object for its own unity.

Thus the passage in B137 (in my view) first presents the transcendental unity of consciousness as the sufficient condition, and then as the necessary condition, for the relation of sensible representations to an object. The object is "that in the concept of which the manifold is united," and the transcendental unity of apperception is "That unity through which all the manifold of a given intuition is united in a concept of the object" (B134). As Kant holds that it is an analytic principle that a given intuition, as "my representation" in transcendental apperception, is in a synthetic unity (in a concept of the object) (cf. B139), it follows that the transcendental unity of consciousness is a sufficient underlying condition for the relation of given sensible representations to an object.

Kant also wants to point out, however, that the original synthetic unity of consciousness is a *necessary* condition for the relation of sensible representations to an object. An object is "that in the concept of which the manifold is united." But "all unification of representations demands unity of consciousness in the synthesis of them," that is, demands unity of the representations in one combined knowledge, in one united subject, itself requiring transcendental synthesis as the *a priori* underlying ground of empirical synthesis (for the synthetic unity of the manifold of outer intuition, and therefore its possible accompaniment by the "I think").

Consequently the original synthetic unity of consciousness alone constitutes the relation of sensible representations to an object and the fact they are modes of knowledge.²

Henry Allison concedes that B137 implies that the transcendental unity of apperception is sufficient as well as necessary for the relation of sensible representations to an object, but he sees himself as avoiding the non-sequitur charge by concluding that Kant must at this point be talking about merely judgmental or logical objects, not "weighty" objects (otherwise the unity of apperception would imply that even judgments about purely subjective inner states of consciousness must necessarily refer to "weighty" objects, which is in contrast to my interpretation, given in fn.2). Therefore, when Kant talks about the transcendental unity of apperception being an "objective unity of apperception" (B140) "The claim is simply that the unity of apperception is an 'objective unity' and 'objectively valid' because it is the ultimate ground or condition of the

² Although the relation of sensible representations to an object is constituted by the synthetic unity of consciousness provided by the categorial synthesis of the manifold in the concept of the object through transcendental apperception (as the *a priori* underlying ground of the empirical understanding), the relation of sensible representations in empirical consciousness to an object is not constituted by the synthetic unity provided by the "I think" of empirical apperception. The relation of sensible representations in empirical consciousness to an (objective) object relies on the representations being given in conformity with the categories (which, for their necessary conformity, presupposes transcendental apperception).

representation of an object in the judgmental sense." 3

I would agree that Kant intends the objective unity which he ascribes to transcendental apperception, that is to the pure understanding, to be the ultimate ground of the empirical understanding and its representations of merely judgmental objects; and Kant's statement that "The logical form of all judgments consists in the objective unity of the apperception of the concepts which they contain" implies that judgments by the empirical understanding, having merely subjective or judgmental objects, also contain an objective unity of apperception.

But this (it seems to me) does not entail that the relation of sensible representations to objects for which the transcendental unity of apperception is a sufficient condition refers the representations to merely judgmental objects. Judgments in both the pure and empirical understanding contain an objective unity of apperception because they combine representations in a formal concept of a judgmental object, through a universal function of judgment; that is, through the logical forms of judgment in the empirical understanding and the *a priori* categories in the pure understanding. The transcendental unity of apperception, however, is that unity through which the pure manifold of a given empirical intuition in general is united in a pure concept of the object, through a necessary relation of sensibility to the "I think," which thereby refers the intuition to "something in general" outside sensibility or receptivity. Therefore the relation of sensible representations to an object for which the transcendental unity of apperception is a sufficient condition does refer the representations to "weighty" or "objective" objects, as it provides the "transcendental content" of our pure concepts, that is, the active synthetic unity (in the concept of the object) of the pure forms of intuition, which underlie all empirical intuitions, thereby referring the intuitions to both the empirical and transcendental object of intuition. Thus "The categories apply *a priori* to objects, a conclusion which general logic is not in a position to establish" (B105).

4. The Subjective Unity Of Empirical Apperception

Allison and other commentators see Kant's statement that the empirical unity of apperception (i.e. my representations in inner sense in time accompaniable by the "I think") has only subjective validity (cf. B140), as contradicting his claim that the logical form of all judgments consists in "the objective unity of the apperception of the concepts which they contain" (B141). However it seems to me that this contradiction is merely an artefact of their own interpretations. In reply to the charge of inconsistency, it has to be borne in mind that the transcendental unity of apperception, described by Kant as an objective unity of apperception, consists in the combination of sensible representations in a pure or formal concept of the object, through a necessary relation between the understanding and sensibility, not the *accompaniment* of sensible representations by the pure concept of an object. (This is proved by the fact that Kant describes pure apperception, that is the necessary relation of sensibility to the "I think," as "that representation which cannot be accompanied by any further representation.") (B133)

Thus the objective unity of apperception which empirical judgments share with transcendental judgments must be the pure combination of the representations involved into a single thought - through a logical function of judgment, not the accompaniment of sensible representations by an act of judgment. Therefore the only objective unity of apperception involved in an empirical judgment such as "If I lift a body I feel an impression of weight" is the combination of the representations involved into a single thought, through the

³ Henry Allison, Kant's Transcendental Idealism. 1998, pp.147-9

universal form of judgment " $p \supset q$ ". Thus the empirical unity of apperception is only a subjectively valid unity of consciousness because it is a merely associative unity of representations in inner sense in time, which can be accompanied by empirical thought, for example the thought that "If I lift a body I feel an impression of weight." Whereas the latter judgment on its own contains an objective unity of apperception - in its combination of the representations involved into a single thought, through the logical form of judgment " $p \supset q$."

Therefore Kant's statement that "The logical form of all judgments consists in the objective unity of the apperception of the concepts which they contain" does not mean, for example, that the associated impressions of the lifting of a body and feeling of weight are accompanied, in empirical self-consciousness, by an act of judgment, but that representations of the lifting of the body and feeling of weight are combined into one thought, through a universal form of judgment.

Thus the relation of sensible representations to an object through transcendental apperception is an objective unity of apperception in virtue of its referring these representations (through a universal function of judgment) to an object of judgment, but it refers them to "weighty" objects in virtue of this combination in the concept of the object taking place in the pure forms of intuition, as a synthesis in general underlying empirical consciousness, which thereby refers the intuitions to both the empirical and transcendental object of intuition.

The above discussion explains why the empirical judgment "Bodies are heavy" (in addition to containing an objective unity of apperception through the logical form of judgment "s is p") is held by Kant to express an objective unity of apperception as an empirical judgment, that is, to express an objectively valid relation of empirical representations in consciousness, while the empirical judgment "If I lift a body I feel an impression of weight" expresses only a subjectively valid unity in consciousness. In the former case the sensible representations of bodies and heaviness are already united in the objective unity of transcendental apperception, in the formal concept of the object, prior to this objective unity being expressed by the empirical judgment "Bodies are heavy." The fact that bodies and heaviness are united under a pure concept of the object, through pure apperception, explains how prior to all my determinate thought I can perceive bodies as being heavy, that is, can comprehend them as combined "in the object" (B142). The explanation is that bodies and heaviness are already united in the necessary unity of consciousness, through the categories, which can (through continuous approximation) combine associated empirical representations under an empirical causal law (as a function of transcendental thought), rather than that these representations necessarily belong to one another in the intuition, ("Bodies are heavy" being only a contingent judgment), or that they belong together as things in themselves outside sensibility.

Thus subjective associations of sensible representations in empirical apprehension are brought to the objective unity of transcendental apperception by being combined, synthetically *a priori*, under the transcendental concept of the object (through the categories). This objective unity in transcendental apperception can then be expressed through an empirical judgment such as "Bodies are heavy." That is, the sensible representations of bodies and heaviness can be comprehended through an empirical judgment as synthetically united in one apperception, that is as "bodies are heavy" because they have already been combined as an objective unity through the necessary unity of consciousness. (That is, they already belong to my representation of the object, in transcendental apperception, because they *can be* combined through an empirical law of nature, as a "special determination" of the category of cause.) If sensible perceptions in

space and time were only combined through laws of subjective association (á la Hume) we could only perceive that "If I lift a body I feel an impression of weight" (or less confusingly "If I have an impression of lifting a body I also have an impression of weight."), not that "It, the body, is heavy" (B142). In other words the empirical representations of bodies and heaviness could only be subjectively related in consciousness.

Thus the way representations are brought under one objective apperception is through the logical functions of judgment. And the categories, in transcendental apperception, are these functions of judgment for the combination of intuitions (rather than concepts) in the objective unity of apperception.

The original synthetic unity of consciousness is therefore an objective condition of all knowledge (cf.B138). -Through which all the manifold of sensible intuition is united in a concept of the object, and in particular, through which the pure forms of sensible intuition are united in the pure 'concept' of an object in general. As found earlier, original apperception can only express its "I think" in the pure forms of both space and time, and thus outer intuition has both a sensible and intellectual pure form, which, in combination, and as underlying perceptual consciousness, provide us with *a priori* knowledge of objects, as appearances of their transcendental ground (and unknowable ultimate ground).

5. The Objective Unity Of Transcendental Apperception

Kant points out the importance of transcendental apperception, as an objective unity of consciousness, being distinguished from the empirical unity of consciousness involved in perception, which is merely a determination of inner sense "through which the manifold for such objective combination is empirically given." Whether I can become empirically conscious of the manifold as simultaneous or successive depends on circumstances or empirical conditions. For example a spatial manifold is given as a temporal succession when I turn my head, but retains its spatial unity in the objective unity of consciousness.

Therefore the "given" succession or simultaneity of appearances (including their *a priori* spatial form) is not "outer intuition" in abstraction from the underlying transcendental synthesis, but just "a determination of inner sense." The pure form of intuition in time, however, merely as intuition in general, is subject (through the necessary relation of sensibility to the "I think") to original apperception and its pure synthesis (in the pure forms of space and time) which is the *a priori* underlying ground of the empirical synthesis (cf.B140).

Thus the empirical unity of consciousness, through association of representations, "itself concerns an appearance, and is wholly contingent." That is, an appearance in which, in abstraction from the transcendental synthesis, nothing "appears." The appearance does not "stand for" or "represent" an object if its pure manifold is not combined in a pure concept of the object through the categories - it is neither knowledge of the object, nor of the subject (which requires the unity of time as an intuition, itself requiring the objective determination of space as well as time) (cf.§26).

Therefore the pure manifold being combined in a pure concept of the object, by pure apperception, is the *a priori* underlying ground of the empirical unity of consciousness involved in perception, combined through the empirical synthesis of apprehension. That is, the same spontaneity, in the one case under the description of the pure understanding, and the other under the description of the empirical imagination, brings unity to the sensible manifold through the representation of the object (cf.B163fn.).

Thus the subject of pure understanding (itself non-spatial and non-temporal) also contains the two pure forms of sensibility in which empirical representations can be received - a successive form in which one representation is replaced by a subsequent representation, that is, time, and a three-dimensional form, that

is, space, in which appearances can be represented as coexistent in time. As mentioned above however, whether or not empirical representations appear as simultaneous or successive depends on circumstances or empirical conditions. For example a spatial relationship of empirical representations is given in temporal succession when turning the head. Thus the subjectively given succession or simultaneity of appearances is purely arbitrary, and the spontaneity of the pure understanding is required for the unity of space and time.

6. "Forms Of Intuition" Versus "Formal Intuition"

Kant holds that our consciousness of the unity of space and time proves that space and time are given *a priori* not merely as forms of intuition but as formal intuitions (containing the necessary unity of apperception). Under the formal intuition of space the spatial aspect of one appearance cannot temporally succeed the spatial aspect of another appearance, as space is given *a priori* as one intuition in which all it's parts are simultaneous. Likewise the intuition of time is of a necessary succession, not one which is dependent on empirical circumstances.

Thus for the perception of objects in space and time the empirical synthesis of apprehension must comply not only with the *a priori* forms of space and time, but also with their *a priori* unity. The *a priori* form of space is just three-dimensional sensible form in general and the *a priori* form of time is just sensible succession in general. If the empirical synthesis of apprehension had to comply only with the *a priori* forms of space and time, and not with their *a priori* unity, spatial aspects could be either simultaneous or successive depending on our views of them, or could be in temporal succession when turning the head in one direction and proceed backwards in time when turning the head in the other direction. The *a priori* forms of space and time would remain, but not their necessary unity. Whereas in the *a priori* unities of space and time all the parts of space must be coexistent and all changes in time must be subsequent to a former time.

Kant contends that this necessary unity of the pure forms of space and time, as it cannot be given through sensibility, presupposes a synthesis by the pure understanding and categories. The categories do not unify the pure forms of space and time by referring them to independent objects, however, in the way in which they unify empirical intuitions by referring them to independent objects (through the formal concept of an object in general). Instead, the categories, as well as being pure concepts of an object in general, and pure concepts of the necessary unity of apperception, are also pure concepts of the necessary unity of space and time. The transcendental unity of apperception cannot provide its own unity in the concept of the object without at the same time providing the unity of the *a priori* forms of space and time, which are the pure forms of sensibility in which it receives its representations, and which must therefore affect all its concepts of objects, which can only be thought in these pure forms of intuition. Thus the same synthesis through the categories which provides the unity of transcendental apperception and the unity of intuition in the concept of the object also provides the unity of space and time as pure intuitions.

The pure concepts of substance and cause etc. are therefore part of the structure of outer intuition in space, rather than being in themselves concepts in inner sense in time, about objects **in outer intuition in space**. The categories are, in fact, pure formal concepts, in the pure forms of sensibility, of something in general outside sensibility - matter is for us, therefore, "...a particular way of representing an unknown object by means of that intuition which is called outer sense" (A385). Thus the pure forms of space and time come together in the pure concept of an object in general. As pure schema (or productive synthesis) this concept provides the synthetic unity of a temporal synthesis of the pure and empirical sensible manifold, that is, the

continuous synthesis of experience (or reproductive synthesis); and as pure category it refers to an object in general outside sensibility, that is to the transcendental object of intuition.

Thus in the Schematism chapter Kant writes "Reality, in the pure concept of the understanding, is that which corresponds to a sensation in general; it is that, therefore, the concept of which in itself points to being (in time)." But - "since time is merely the form of intuition, and so of objects as appearances, that in the object which corresponds to sensation is the transcendental matter of all objects as things in themselves (thing hood, reality)⁴ (B182). Whereas the schema of a reality is "the quantity of something in so far as it fills time" (B182). See also the "Ideal of pure reason" where Kant states that transcendental affirmation "is a something the very concept of which in itself expresses a being. Transcendental affirmation is therefore entitled reality, because through it alone, and so far only as it reaches, are objects something (things)..." (A575/ B603).

Thus the transcendental synthesis of the manifold in the 'concept' of the object, through the productive synthesis of the categories, has both a direct and indirect referent, that is both a direct object of pure thought or synthesis - the transcendental synthesis itself (or "figurative synthesis") which grounds our empirical knowledge of causal substance in space and time; and an indirect object, or transcendental object, of this pure thought or synthesis, that is, the concept of "something in general" outside sensibility. In this way our empirical intuitions of objects in space and time also refer to the transcendental ground of the intuition, and therefore to both the direct and indirect referent of transcendental synthesis.

The productive syntheses through the categories in so far as they provide the synthetic unity of the pure intuitions of space and time, however, only have a direct referent - that is, the pure productive synthesis itself, as the infinite possibility of a synthesis in the three dimensions of space and one dimension of time, underlying *a priori* all empirical spaces and times.

7. Conclusions From The B-Deduction Overview

In the opening paragraph of the B-deduction Kant writes - "The manifold sensible representations can be given in an intuition that is purely sensible, that is, nothing but receptivity, and the form of this intuition can lie *a priori* in our faculty of representation, being nothing more than the mode in which the subject is affected" (B130). The combination of the manifold, however, which makes this sensible unity of intuition possible, cannot come to us from the senses and cannot therefore be already contained in the pure sensible forms of intuition, as It is an act of the self-activity of the subject itself (which Kant calls the understanding, to distinguish it from the receptivity of sensibility). Thus the sensible unity of a given intuition, including that of space and time as intuitions, is only possible through an underlying transcendental synthesis by the pure understanding, in its necessary relation to sensibility as transcendental imagination.

The obvious question at this point is why combination through the apprehensive synthesis of the imagination alone is not sufficient for the sensible unity of intuitions in space and time, without pure concepts of the understanding being necessary. Kant points out, however, that synthesis through the apprehensive imagination cannot on its own provide the unity of space and time; the imagination can only combine sensible appearances (including their *a priori* sensible forms) in the order they enter consciousness, which is purely arbitrary, as whether appearances are given as simultaneous or successive depends on empirical circumstances. Thus the apprehensive synthesis requires direction by the pure

⁴ Taking Erdmann's rather than Kemp Smith's as the correct translation of this sentence.

understanding for sensible perception in space and time to be possible.

Thus the fact that the unity of the sensible manifold cannot be *given*, but requires combination by the subject, implies not just apprehensive synthesis but a combined apprehensive **and apperceptive synthesis** - for the synthetic unity of the combination.

The concept of combination, Kant points out, contains not just the concept of the manifold and of its synthesis, but also the concept of the unity of the manifold. "Combination is representation of the *synthetic* unity of the manifold" (B131). That is, synthetic unity is not just the result of combination but a necessary aspect of the combination itself. But this concept of the synthetic unity of the manifold, says Kant, cannot be the category of unity (as applied to intuitions in which combination of the manifold is already thought).⁵ We must therefore look yet higher for this unity - in that which contains the ground of the possibility of the understanding itself, even in its logical employment. This heralds Kant's argument in §16, regarding the "I think" and its *a priori* ground in pure apperception (B132). That is, we must look to the original synthetic unity of apperception (which contains the sensible manifold as an active synthetic unity in transcendental consciousness, rather than as a unity belonging to perception, which can be accompanied by the "I think").

Kant points out the necessity of distinguishing the transcendental unity of self-consciousness, as an objective unity of consciousness, from the empirical unity of consciousness, which is merely "...a determination of inner sense" (B140). The empirical unity of *self-consciousness*, he goes on to say, is merely derived from the transcendental unity under given conditions "inconcreto," and has merely subjective validity. These two sentences have caused considerable controversy amongst Kant scholars, and I shall now discuss them according to my interpretation. Before the determination of any object the undetermined subject contains the *a priori* forms of sensible intuition, which are not yet unified as outer intuition in space and inner intuition in time. In abstraction from the transcendental synthesis the pure forms of space and time, along with their empirical manifold, are in a purely contingent association of appearances - which can be either successive or simultaneous depending on empirical circumstances, as they contain no necessary unity, and therefore no objectivity; their sensible manifold (as mentioned above) contains only appearances, in which nothing "appears," not even the subject, as knowledge of the subject requires its determination in time, which itself requires the prior determination of objects in space.

If the attempt is made, prior to the objective determination of objects in space, to determine appearances as a unity in an objective time order in inner sense, in which the subject exists along with its successive representations, this could not succeed, as the time order and time direction would be purely arbitrary. Whether an appearance comes before or after another in time, or appearances proceed forwards or backwards in time, could depend, for example, on which way I turn my head (to use physical object language for convenience' sake). Therefore no necessary temporal order of representations would be possible, to which the "I think" could be applied or could accompany. Thus we would have subordinated space to time, and in so doing would have lost the objectivity of both.

Therefore to make empirical associations into the empirical unity of self-consciousness requires much more than just accompanying the former with the "I think." The unification of time as an intuition is first

⁵ The synthetic unity involved in original combination "is not the category of unity (§10)" as a category already presupposes combination, "we must therefore look yet higher for this unity (as qualitative, §12)" (B131). In §12 Kant distinguishes between the categories insofar as they are applied to things,§10, and the formal categories as governing not things but the thought of things - which he terms qualitative - "In every cognition of an object there is unity of concept which one can call qualitative unity, insofar as there is thought under it only the unity of the synthesis." This implies that the "higher unity" being looked for, although it is not the unity of the categories as a unity applied to things, will be found to be the formal unity of the categories, as a unity of synthesis in the pure understanding, in pure sensibility.

required, and this is only possible through a combined unification of both space and time, in the transcendental determination of outer objects. Thus the empirical unity of apperception is "merely derived from" the transcendental unity under given conditions "inconcreto," and has only subjective validity.

It follows that both the pure and empirical sensible manifold can be unified so that the "I think" can accompany my representations in inner sense in time, but this is only possible through the necessary relation of "all the manifold of sensible intuition" to the one "I think," in providing the comprehensible unity of both outer and inner intuition.

Thus un-objectified appearances in contingent associations in the pure forms of intuition are brought to the objective unity of apperception through the categories (as pure concepts of an object in general, thought in the pure forms of intuition) which thereby make these given sensible appearances into the appearance of their unknowable ground, which now "appears" in the appearance, (as its transcendental referent). Only subsequently can the same un-objectified sensible appearances (now in the "given" unity of time) be made into a concept of the subject, in which the unknowable transcendental subject "appears" as the "I think" of the empirical subject, which can accompany "my representations" in inner sense in time.

Therefore the role of the categories, as I see it, is to make sensible appearances into the appearance of their unknowable ground. That is, to "know" appearances we have to know them as the appearance of something. This seems to me to have been Kant's concern in the Marcus Hertz letter also 6, relating to the *Inaugural Dissertation* - that is, how can a representation which is not the effect of the object nevertheless refer to the object. That is, how can pure concepts, for example of cause and substance, refer to the object, if not by the way the object affects us. The answer of the deduction, I am suggesting, is that they refer to the object by making the sensible appearance (that is the effects of the object) into the pure concept of the object (as "something in general" outside sensibility). In other words they make experience of the object possible by making the object "appear" in the appearance. (Thus an "objective appearance" is the effect of both the transcendental object *and* the transcendental subject, thought indirectly as one co-ordinated "object in appearance" in space and time.)

Thus through the "real use" ⁷ of the understanding the categories unite the pure forms of intuition in the pure concept of the transcendental object, as the "transcendental content" of the "logical use" of the categories, in their application to objects given **in intuition**.

⁶ "In the dissertation I was content to explain the nature of these intellectual representations [concepts of the understanding] in a merely negative manner, viz. as not being modifications of the soul produced by the object. But I silently passed over the further question, how such representations, which refer to an object and yet are not the result of an affection due to that object, can be possible." From - Norman KempSmith, "A commentary to the Critique of Pure Reason". 2nd ed., pp. 219-220.

⁷ My view on the "real use of the understanding" opposes (among others) that of Henry Allison, in *Kant's Transcendental Idealism*, 2004, pp.152 - 156, and Beatrice Longueness, in *Kant and the Capacity To Judge*, 1998, pp.17 - 34.

§ 2: THE TWO-STEP ARGUMENT OF THE B DEDUCTION

The foregoing sections were intended as a general exposition of the B-Deduction, according to my interpretation. In the present section I will take a more systematic approach, through an interpretation of the "two-step" argument of the B-deduction.

Kant's reasoning from §20 to §26 has given rise to much debate amongst Kant scholars regarding his intended proof structure. In my interpretation I will follow Dieter Henrich's suggested criterion⁸ - that the two similar sounding conclusions of §20⁹ and §26¹⁰ are only comprehensible, in the light of Kant's remarks in §21: - "Thus in the above proposition a beginning is made of a deduction of the pure concepts of the understanding" (B144), as describing two steps in one argument, rather than two separate arguments for one conclusion, as some commentators have claimed.

1. An Overview Of The Two-Step Deduction

In §20 Kant sums up the arguments he has presented so far. The heading is "All sensible intuitions are subject to the categories, as conditions under which alone their manifold can come together in one consciousness." Kant begins "The manifold given in a sensible intuition is necessarily subject to the original synthetic unity of apperception, because in no other way is the unity of intuition possible" (B143). This is in reference to §17, where Kant states that the supreme principle of the possibility of all intuition, in its relation to understanding, is that all the manifold of intuition should be subject to the conditions of the original synthetic unity of apperception (which is constituted by the *a priori* combination of the manifold in a formal representation of the object). Intuitions can be presented as "my representations" (of objects) prior to any accompaniment by the "I think," which implies an original synthetic unity of self-consciousness, comprised of a pure understanding with a necessary relation to sensibility, which unites the sensible manifold in an active unity of consciousness prior to any empirical apperception or thought.

In §18 Kant describes this transcendental unity of apperception as an objective unity of consciousness, because ".. it is that unity through which all the manifold given in an intuition is united in a concept of the object" (B140). "But that act of understanding by which the manifold of given representations (be they intuitions or concepts) is brought under one [objective]* apperception is the logical function of judgment" (B143). Kant is here referring to §19, which is headed "The logical form of all judgments consists in the objective unity of the apperception of the concepts which they contain" (B141), i.e. consists in the combination of these concepts in a unity of self-consciousness which also represents a unity outside itself. This also applies to the original combination through which the pure understanding unites the manifold of sensible intuition (rather than concepts) in a formal concept of the object, in bringing the manifold to the objective unity of transcendental apperception (in the formal concept of the transcendental object), prior to all thought in the empirical subject in inner sense in time.

"All the manifold therefore in so far as it is given in a single¹¹ empirical intuition is determined in respect of one of the logical functions of judgment, and is thereby brought into one consciousness. Now the categories

⁸ In "The Proof Structure of Kant's Transcendental Deduction," *Kant on Pure Reason.* R.Walker, Ed. p.67

⁹ "The manifold in a given intuition is necessarily subject to the categories." (B143)

¹⁰ "The categories are valid a *priori* for all objects of experience." (B161)

^{*} My insertion

are just these functions of judgment, so far as they are employed in the determination of the manifold of a given intuition (cf.§13). Consequently the manifold of a given intuition is necessarily subject to the categories" (B143). Thus the unity of a given intuition, as a unity for the understanding (cf.§17) presupposes the *a priori* categories, as logical functions of judgment for pure apperception by which all the manifold of intuition is united in a concept of the object.

In §21 Kant adds "A manifold, contained in an intuition which I call mine, is represented, by means of the synthesis of the understanding, as belonging to the necessary unity of self-consciousness, and this is effected by means of the category." A footnote states that the proof of this rests on the presented unity of intuition by which an object is given. This unity of intuition always includes in itself a synthesis of the manifold given for an intuition, and so already contains the relation of the manifold to the unity of apperception. "This [requirement of a] category therefore shows that the empirical consciousness of a given manifold in a single intuition is subject to a pure self consciousness a priori, just as is empirical intuition to a pure sensible intuition, which likewise takes place a priori" (B144). That is, sensible intuitions can be presented as "my" representations of objects, prior to all thought, implying a pure self-consciousness which unites the pure manifold of the intuition in a pure concept of the object, underlying the sensible unity of the intuition as it appears to empirical consciousness. Therefore the empirical consciousness of the intuited object is subject to this pure self-consciousness - which must combine all the manifold of the intuition in a transcendental concept of the object (through the categories) for its own unity, and this explains the conformity of the intuited object to the categories. Thus the requirement of a category (for an intuition to be "mine" prior to all thought) shows that the empirical consciousness of the intuition is synthetically subject to the categories, in a pure self-consciousness a priori.

Kant now goes on to say:

Thus in the above proposition a beginning is made of a *deduction* of the pure concepts of the understanding; and in this deduction, since the categories have their source in the understanding alone, *independently of sensibility*, I must abstract from the mode in which the manifold for an empirical intuition is given, and must direct attention solely to the unity which, in terms of the category, and by means of the understanding, enters into the intuition. In what follows (cf. §26) it will be shown, from the mode in which the empirical intuition is given in sensibility, that its unity is no other than that which the category (according to §20) prescribes to the manifold of a given intuition in general. Only thus, by demonstration of the *a priori* validity of the categories in respect of all objects of our senses, will the purpose of the deduction be fully attained (B145).

In other words, in §§20/21 Kant has made a beginning of a deduction of the pure concepts of the understanding, by showing that the unity of a given intuition, as the representation of an object prior to all thought, implies that the empirical consciousness of the intuition is subject to a pure self-consciousness, constituted by a pure understanding *a priori*, which determines the conformity of the empirical intuition to the categories. Kant must now show that all intuitions given to empirical consciousness are subject to the categories, that is that all intuitions can be represented as objects *a priori*, through the transcendental

¹¹ Ibid, p.70, Dieter Henrich suggests that the capital E of "in Einer Anschauung" ("in an intuition") indicates the inner unity of the intuition, rather than its singularity, as in Kemp Smith's translation.

concept of the object.

Therefore in explaining the application of the categories to intuition, in the second part of the deduction, Kant must abstract from the mode in which the *empirical intuition* is given in sensibility, that is as a sensible perception in sensible space and time, and attend solely to the unity which the category (having its source in the understanding and not in perception) supplies to the intuition (in the mode in which the intuition is given in *pure intuition*). In what follows (cf.§26) it will be shown that the sensible unity of a given intuition, as it appears to empirical consciousness, **can only be that which an underlying categorial synthesis**, in pure intuition, prescribes to the manifold of a given intuition in general (through a necessary relation between the pure understanding and pure intuition).

Thus to prove their *a priori* validity for all objects of our senses Kant must not only explain how the pure concepts of the understanding can supply unity to the manifold of an outer intuition (given that the understanding is empirically quite distinct from all intuition), but he must explain how they can at the same time prescribe that unity to the manifold of a given intuition in general, in "the mode in which" the empirical intuition is given in sensibility, i.e. in empirical consciousness in inner sense in time. This latter condition is required because the transcendental synthesis of the manifold through the categories only has objective reality, as a synthetic *a priori* concept, in so far as it necessarily underlies experience, as empirical synthesis in inner sense in time, which supplies us (indirectly) with the objects we claim to have synthetic *a priori* knowledge of through the categories. That is ".. experience, as empirical synthesis, is, in so far as such experience is possible, the one species of knowledge which is capable of imparting reality to any non-empirical synthesis" (B197).

Thus the categories, for their objective reality, must be able to prescribe unity *a priori* to all intuitions "in the mode in which the empirical intuition is given in sensibility," that is in empirical consciousness in inner sense in time. Therefore Kant has to show that the categories can be applied to sensibility in such a way as to necessitate the unity, in conformity with them, of all intuitions given to empirical consciousness. To this end Kant demonstrates that the *a priori* categorial synthesis, in pure intuition, as the condition for the possibility of objects of intuition, through transcendental synthesis, step one, is likewise the condition for the possibility of experience, and objects of experience (as empirical synthesis) step two. That is, that the categories as the conditions for pure knowledge are also the conditions for empirical knowledge (whether of the object or of the subject).

2. Preliminary Discussion Of The Sensible Application Of The Categories

In the first step of the deduction the unity of a given intuition, as "my representation of an object" prior to all thought, is shown to imply the categories, as logical functions of this unity in pure apperception. However for the objective reality of the categories their application to sensible intuitions as synthetic *a priori* concepts must be explained. They must be shown to be logical functions of judgment for pure apperception which are valid *a priori* of all intuitions given to empirical consciousness.

Thus Kant has shown in the first step of the deduction that the unity in consciousness of a given intuition implies an *a priori* consciousness of the intellectual synthesis of the intuition, in the pure representation of an object, prior to all thought, without considering how the understanding can thus determine sensibility in conformity with its own unity. Therefore in §24 Kant explains the application of the categories to intuition as productive functions of the transcendental imagination, in the pure forms of intuition, which underlie *a priori*

all intuitions given to empirical consciousness, as objects in space and time.

In §26, however, Kant proves the objective reality of the categories not just as logical functions of judgment which apply analytically to all intuitions which represent objects prior to all thought, but as synthetic *a priori* concepts, applying to all objects of possible experience (as objects of empirical synthesis). The categorial synthesis is shown to be a synthesis in general in an original consciousness, in pure intuition, necessarily underlying all intuitions given to empirical consciousness, and can therefore "prescribe laws to nature."

Thus the reason Kant needs step two of the deduction is that although step one deduces the categories as logical functions for the unity of a given intuition, as my representation of an object prior to all thought, they can only have synthetic *a priori* validity, that is, can only be synthetic *a priori* concepts, if they can prescribe this unity to empirical intuitions universally, in "the mode in which they are given in sensibility." Which means they can only have objective reality if they are the conditions, in a consciousness in general, for the possibility of intuitions as sensible representations in the empirical subject, not just conditions for the possibility of intuitions as "my representations" in transcendental apperception.

Thus Kant proves in §§20 - 24 that transcendental synthesis is necessarily subject to the categories, as logical functions of judgment which make objects of intuition possible, by combining all the manifold of intuition in a transcendental concept of the object, prior to all thought. In §26, however, he proves that the empirical synthesis of apprehension, which makes perception possible, is subject to this same categorial synthesis, for the *a priori* unity of space and time required for perception. "All synthesis, therefore, even that which renders perception possible, is subject to the categories; and since experience is knowledge by means of connected perceptions, the categories are conditions of the possibility of experience, and are therefore valid *a priori* for all objects of experience"(B161). That is, since all experience is necessarily subject to the categories, for the possibility of perception, the categorial synthesis of intuitions in the concept of the object, which is shown (in §24) to be a sufficient underlying condition for the possibility of experience, and objects of experience (as empirical synthesis), is also shown to be their necessary condition, and therefore the categories are valid *a priori* for all objects of experience.

Thus in §26 Kant proves the objective reality of the categories as synthetic *a priori* concepts, by showing how their application to intuition, as logical functions of judgment for pure apperception, can prescribe unity to all intuitions given to the empirical subject. He does this by demonstrating their objective reality as universals, in pure intuition, necessarily underlying all intuitions given to empirical consciousness (which are subsumed under the categories synthetically *a priori*).

It can be seen from the above that the application of the categories to sensible intuition entails much more than just applying a concept given in inner sense in time to empirical intuitions given in outer intuition in space. The pure categories in themselves, Kant points out, are just pure forms of thought, through which alone no determinate object can be known, as knowledge requires both concept and intuition. But the categories cannot in themselves be concepts in inner intuition in time which we use to determine objects in outer intuition in space, as for one thing sensibility and understanding are completely distinct "faculties of the mind," and it cannot be accepted that an individual thought in inner sense in time can make objects in outer intuition in space conform to our understanding. Therefore Kant has to show how subjective conditions of thought can have objective validity (cf.B122). In other words how the categories, as conditions of the possibility of experience (i.e. conditions of the possibility of empirical knowledge through connected

perceptions in inner sense in time) are at the same time "conditions of the possibility of objects of experience" (i.e. objects intuited outwardly in space in conformity with our concepts).

Another reason the categories cannot in themselves be temporal items in the empirical subject, however, is that they are held by Kant (in §26) to be prior to, and to make possible, time itself as an intuition, thus the categories must be atemporal. So Kant has to explain how atemporal categories, which combine outer intuitions in general in the transcendental concept of the object, can also relate to, and make possible, the concrete temporal experience of the perceiving individual. The argument in §§20/21 is just an indirect transcendental argument for pure categories, as the necessary ground of the comprehensible unity of intuitions prior to all empirical thought. A direct argument is also needed, to show how the categories, as a priori functions for unifying the sensible manifold in general in the concept of the object, can relate transcendentally to sensibility, and lead to the desired result - the conformity to the categories of all intuitions given to the empirical subject.

To this end, in §26, as referred to above, Kant proves the *objective reality* of the categories as synthetic *a priori* concepts, through their application to intuition as universals, in pure intuition, necessarily underlying all intuitions given to empirical consciousness (whether as a knowledge of the object or of the subject).

3. The Argument Of §24

The aim of §24 is to explain the application of the categories to intuition as logical functions of judgment for pure apperception, which, as transcendental syntheses underlying empirical consciousness, make the application of the categories to appearances in space and time possible. That is "the application of the categories to objects of the senses in general" is demonstrated.

As discussed above, Kant states that although they are the ground for the possibility of *a priori* knowledge as far as it rests on the understanding, the categories are in themselves merely pure forms of thought "for thinking objects in general in sensible intuition," whose synthesis of the sensible manifold "prior to all thought" therefore relates only to the unity of transcendental apperception, through their *qualitative* unity (cf. fn. p.24 above). As this synthesis is purely intellectual it requires a determinate application to intuition (as receptivity) for any *knowledge* to be possible.

The categories, as they themselves provide the unity of space and time, and since their purported purpose, on Kant's thesis, is to relate intuitions to objects, cannot in themselves be concepts in inner sense in time applied to intuited objects in space, but must originally be applied in the pure forms of intuition in the transcendental subject, and have as their object an object in general outside sensibility, not an object given *in* intuition; whilst at the same time determining sensibility in empirical consciousness in conformity with the synthetic unity of apperception (and therefore with the *quantitative* unity of the categories, through their application by the empirical subject).

Thus Kant writes:

..since there lies in us a certain form of *a priori* sensible intuition, which depends on the receptivity of the faculty of representation (sensibility), the understanding, as spontaneity, is able to determine inner sense through the manifold of given representations, in accordance with the synthetic unity of apperception, and so to think synthetic unity of the apperception of the manifold of *a priori* sensible intuition - that being the condition under which all objects of our human intuition must

necessarily stand. In this way the categories, in themselves mere forms of thought, obtain objective reality, that is, application to objects which can be given us in intuition. These objects, however, are only appearances, for it is solely of appearances that we have *a priori* intuition (B150).

Kant's claim is that through the categories (as qualitative unity) pure apperception combines the pure forms of intuition, which are the *a priori* forms of all empirical intuitions, in the pure 'concept' of an object in general, which thereby (through the parallel productive, reproductive, and apprehensive syntheses) unifies the sensible manifold as outer intuition in space. It follows that this unification of outer intuition in the concept of the object also determines the empirical consciousness of the given manifold in conformity with the categories, through the effect of figurative synthesis on inner sense. In other words through the effect of intuition as spontaneity¹² in the pure imagination (in which the synthesis of apprehension is an aspect of the transcendental representation of the object), on intuition as receptivity in empirical consciousness (the synthesis of apprehension now being under the description of empirical imagination rather than transcendental imagination).

Thus the subject of pure understanding (itself non-spatial and non-temporal) contains the two pure receptive forms of sensibility, and the understanding is able, in its necessary relation to sensibility as transcendental imagination (and using the categories as logical functions of judgment) to think synthetic unity of the manifold of *a priori* sensible intuition - in both transcendental and empirical consciousness, i.e. as both spontaneity and receptivity. The object given in perception is therefore the result of these combined transcendental and empirical syntheses. In this way the categories obtain objective reality as logical functions of judgment - that is, application to objects of judgment which can be given to us in intuition (as appearances of their transcendental ground). Thus the application of the categories to objects of the senses entails that the empirical cognition of the object, as causal substance in space and time, is grounded *a priori* in the pure concept of an object in general, thought through the categories (in the pure forms of space and time) through the transcendental imagination. "Imagination" says Kant:

..is the faculty of representing in intuition an object that is *not itself present*. Now since all our intuition is sensible, the imagination, owing to the subjective condition under which alone it can give to the concepts of the understanding a corresponding intuition, belongs to *sensibility*. But in as much as its synthesis is an expression of spontaneity which is determinative, and not, like sense, determinable merely, which is therefore able to determine sense *a priori* in respect of its form in accordance with the unity of apperception, the imagination is to that extent a faculty which determines the sensibility *a priori* and its synthesis of intuitions, conforming as it does to the *categories*, must be the transcendental synthesis of the *imagination*. This synthesis is an action of the understanding on the sensibility, and is its first application - and thereby the ground of all its other applications - to the objects of our possible intuition. As figurative it is distinguished from the intellectual synthesis which is carried out by the understanding alone, without the aid of the

¹² Although Kant holds that we do not have intellectual intuition he implies that we do have, in addition to sensible intuition, pure imaginative intuition - which contains both sensibility and understanding (as well as will and reason, on my contention).

imagination.. (B152).

That is, the synthesis of the understanding "if the synthesis is viewed by itself alone, is nothing but the unity of the act, of which, as an act, it is conscious to itself, even without [the aid of] sensibility, but through which it is yet able to determine the sensibility" (B153-4). In other words as distinguished from the sensible (or figurative) aspect of transcendental synthesis, the intellectual synthesis is the thought of the unknown object affecting sensibility, as substance and cause, that is as object in general, which could also conceivably be thought in sensible intuition different from our own, of the transcendental object affecting that subject's sensibility.

Therefore in relation to empirical intuitions the universality of the categorial synthesis, in pure intuition, consists in abstracting from the empirical intuitions¹³ rather than being abstracted from them, as in the case of empirical concepts; and the intellectual synthesis, in pure intuition, abstracts from sensibility, rather than being in abstraction from it. If the intellectual synthesis, which applies to objects of intuition in general (established in the first part of the deduction), is held to be prior to the imaginative synthesis, as some commentators have claimed, this would be in conflict with Kant's statement given above, which claims that the transcendental imaginative synthesis is the first application of the understanding to objects of our intuition, and thereby the ground of all others (cf.B152).

In §24 Kant now goes on to say "In so far as imagination is spontaneity I sometimes also entitle it the *productive* imagination, to distinguish it from the *reproductive* imagination, whose synthesis falls within the domain, not of transcendental philosophy but of psychology"(B152). In my view this statement does not contradict the A version of the deduction (as is often claimed), in which the transcendental imagination has a reproductive as well as a productive role (cf.A102). The reproductive synthesis of the transcendental imagination (on my understanding) is a temporal synthesis which determines the pure and empirical sensible manifold in accordance with associative laws of appearances in space and time, and these associative laws, at their most general, as subsumed under the *a priori* category of cause, are the empirical laws of nature, which cannot be known *a priori* but only through experience - that is, through the "judgments of experience" of the prolegomena, which are objectively valid judgments (or necessary judgments, in Kant's terms) in so far as they are subsumed under the category of cause, but not *a priori* judgments in so far as they are actual empirical causal laws. Thus the reproductive synthesis "is entirely subject to empirical laws, the laws, namely, of association, and which therefore contributes nothing to the explanation of the possibility of *a priori* knowledge" (B152).

The same pure understanding, however, is involved in the reproductive synthesis as is involved in the productive synthesis (which grounds the former) but the productive synthesis in the pure forms of space and time must take place as an atemporal synthesis, whereas the reproductive synthesis according to the associative laws is a temporal synthesis underlying perceptual consciousness. As we have already seen,

¹³This I have contended (pp.27-28) is Kant's meaning in B145 (against the majority view that he is referring to the abstraction involved in the first part of the deduction). Kant writes "..and in this deduction, since the categories have their source in the understanding alone, independently of sensibility, I must abstract from the mode in which the manifold for an empirical intuition is given, and must direct attention solely to the unity which, in terms of the category, and by means of the understanding, enters into the intuition. In what follows (cf.§26) it will be shown, from the mode in which the empirical intuition is given in sensibility, that its unity is no other than that which the category (according to §20) prescribes to the manifold of a given intuition in general" (B145). Thus in transcendental logic "the object itself is presented as an object of the mere understanding," rather than as an object of the senses accompanied by the understanding (cf. Kant's "Logic" - Introduction, p.18). I.e. transcendental logic brings to concepts "not representations but the pure synthesis of representations" (cf.B104).

In regard to the notion of abstraction I have used above see also Kant's Inaugural Dissertation P53,6.

Kant holds that the empirical unity of self-consciousness, involved in the perception of given objects, is merely derived from the transcendental synthesis "under given conditions inconcreto" (B140). E.g. the fact that the subjective empirical representation of a fire is followed by the subjective empirical representation of smoke, in empirical self- consciousness, is derivative upon the reproductive synthesis of these appearances according to an associative law, or empirical law of nature, (as a function of transcendental thought).

Therefore the reproductive synthesis "falls in the domain of psychology," but it must be transcendental psychology, as the role of empirical psychology in perception is to synthesise empirical representations in empirical apprehension and reproduction, which (as the perception of a given object) is itself grounded in the transcendental reproductive synthesis (and at a higher level in the productive synthesis).

Thus in §24 the application of the categories to intuition as logical functions of judgment for pure apperception is explained, through the activities of the transcendental imagination - which is the action of the pure understanding upon sensibility, and is thereby the sufficient underlying condition for the unity of given intuitions as they appear to empirical consciousness (through the effect of figurative synthesis on inner sense).

4. The Argument Of §26

(i) Apprehensive synthesis implies the categories

Kant's aim in §26, however, is to demonstrate the objective reality of the categories as synthetic *a priori* concepts, valid of all objects of possible experience (as empirical synthesis), by showing that the categorial synthesis of the manifold in the concept of the object, through pure apperception, is both sufficient *and necessary* for the empirical unity of consciousness involved in perception. Thus he demonstrates "the universally possible employment in experience of the pure concepts of the understanding." He states that in the metaphysical deduction the *a priori* origin of the categories is proved through their complete agreement with the logical forms of judgment, and that the transcendental deduction "cf. §§20/21" showed the possibility of the categories as *a priori* modes of knowledge of objects of an intuition in general (B159). And in §24 Kant has explained how the categories can have application to intuition as logical functions of judgment, through their role as productive functions of the transcendental imagination, in the pure forms of intuition, which underlie *a priori* all intuitions given as objects prior to all thought.

For their objective reality as synthetic *a priori* concepts, however, these productive functions must be thought universally, not just in relation to intuitions given as objects in outer intuition in space, but in relation to intuitions in "the mode in which" they are given in empirical consciousness (i.e. as sensible determinations of the empirical subject). Thus the **application of the categories to objects of the senses in general** (as objects of both empirical and transcendental synthesis) (§24), does not entail the *a priori* **validity of** the categories for all objects of our senses, which requires §26 (cf.B145).¹⁴ §24 only proves the objective reality of the categories insofar as they are logical functions of judgment for pure apperception as well as for empirical apperception, which are implied in so far as intuitions are given as "my representations"

¹⁴ The counter-intuitive aspect of this is due to the fact that the "application of the categories to objects of the senses in general" (§24) entails that the categorial unity of intuitions in pure apperception (in the pure concept of the object) determines the unity of the same intuitions as a unity in empirical consciousness, through the effect of transcendental synthesis on inner sense, rather than starting from empirical intuitions in space and time to which the categories are then applied (as in the empirical application of concepts). I.e. the application of the *a priori* categories to objects of the senses in general, of §24, is a "top-down" application. Thus in transcendental logic an intuition is given as an object in general *before* it is given as an intuition in space and time which can be accompanied by the "logical use" of the categories. Therefore to apply necessarily to all objects of our senses, the categories, as transcendental syntheses in pure apperception, have to be shown to be *necessary* as well as sufficient for the empirical unity of consciousness involved in perception.

of objects, prior to all thought, therefore applying to all objects of our senses in so far as they, as intuitions, represent objects a priori (as well as representing them empirically, through empirical synthesis). Kant still has to prove that objects of our senses cannot be objects of empirical synthesis alone - that is, merely subjective objects, as sensible unities in the sensible intuitions of space and time, which may not necessarily conform with the categories of our understanding. Kant has so far proved that both intellectual synthesis (§20/21) and figurative synthesis (§24) presuppose the *a priori* categories. He now has to prove that apprehensive synthesis also presupposes them, and therefore that all synthesis is subject to the categories, which are therefore valid *a priori* for all objects of experience (cf.B161).

Thus the categories are only knowable synthetically *a priori* if the "given" manifold of inner sense is **necessarily conformable to them**. But this necessity cannot be thought in relation merely to empirical intuitions, which can only be a knowledge of a particular empirical manifold, not the empirical manifold in general. Kant's strategy is therefore to show that the categories are thought as universals, in the pure forms of intuition, necessarily underlying all intuitions given to empirical consciousness.

As stated by Kant in another work:

Synthetic *a priori* cognition is possible because there are two *intuitus a priori*: space and time, in which a synthesis of composition is possible *a priori*. The *universale* is here given in the *singulari* in intuition, and the universal of synthesis considered in the *singulari*. How is *a priori* cognition possible from synthetic judgments?.. Cognition is a judgment out of which arises a concept having objective reality, that is a concept to which a corresponding object can be given in experience.. However all experience consists of an intuition of an object, that is an immediate and individual representation through which the object is given for cognition, and of a concept, that is a representation mediated by a mark common to various objects whereby the object is thought - neither of these modes of representations constitutes a cognition by itself; and if synthetic *a priori* cognitions are to be given, then there must be *a priori* intuitions as well as *a priori* concepts.. (AA1845593, 1770s to early 80's). (cf. Robert S. Hartman in "Immanuel Kant, Logic")

In other words a concept, e.g. the concept of cause, can only have objective reality if an intuition corresponding to it can be given in experience - but the only intuition which can correspond to the *a priori* concept of universal causality is intuition in general - i.e. pure intuition, as the *a priori* underlying ground of all objects intuited in space.

As well as relating necessarily to all intuitions given objectively in space, however, the categories must also have objective reality as concepts in the understanding. But to have objective reality as a synthetic *a priori* concept in the pure understanding, valid of all possible empirical intuitions in sensible space and time, a category cannot be a concept in inner sense in time in the empirical subject, but must again be a concept in pure intuition in time in general (in transcendental apperception), necessarily underlying all intuitions given to empirical consciousness (such that all intuitions **can be subsumed under the category**). Therefore the categories, for their objective reality, must be *a priori* concepts (in pure intuition) which necessarily underlie all intuitions given objectively in outer intuition in space, as well as all intuitions in so far as they are given as sensible representations in the empirical subject.

(ii) A priori forms of judgment versus a priori judgments

Thus as well as explaining the application of the categories to intuition as necessary forms of judgment for the unity of intuition and apperception, Kant also has to explain how they can have objective reality as necessary judgments, applying to intuitions in general. E.g. the logical form of judgment "ppq" is one of the necessary forms of judgment for "the unity of representations in a consciousness," but it is not the form of a necessary judgment, such as e.g. "ppp." Therefore the fact that the categories are necessary functions of judgment for the pure understanding, which must combine the manifold in a concept of the object for the transcendental unity of consciousness, does not thereby prove that they are necessary judgments, applying to empirical intuitions in general. In the Prolegomena Kant states that the logical forms of judgment, which unify representations in a consciousness, if they serve for concepts are concepts of the representations' necessary unity in a consciousness, and are therefore principles of objectively valid judgments (proleg-2nd part, sec 22). E.g. "pp p" is presumably an analytic example of a logical form of judgment "serving for a concept," and therefore as a principle of objectively valid analytic judgments.

The categories are logical functions of judgment in transcendental apperception which also "serve for concepts," as a category is a logical function of judgment which prescribes unity to objects of intuition in general, and therefore the categories serve as concepts of the necessary unity of intuitions in transcendental consciousness. But as transcendental apperception is *constituted* by the categorial combination of intuitions in a concept of the object, the necessary relation of intuitions (as "my representations" in transcendental apperception) to the categories, is an analytic principle in pure apperception, rather than the synthetic *a priori* principle to which the deduction is directed. (I.e. - because the categories apply necessarily to all intuitions given as "my representations" in transcendental apperception is not to say that they apply necessarily to all intuitions given as "my representations" in the empirical subject.)

As transcendental logic does not abstract from the pure content of knowledge, however, that is, from pure sensibility, categorial judgments applying analytically to all intuitions as "my representations" in transcendental consciousness apply synthetically to the same intuitions in "the mode in which" they are given in empirical consciousness. In other words the transcendental synthesis of a given intuition in the concept of the object can determine (in conformity with the categories) the sensible unity of the intuition as it appears to empirical consciousness (through the effect of figurative synthesis on inner sense).

It may seem to follow that the categories are therefore *a priori* valid for all intuitions given to the empirical subject, as the latter has been shown to be synthetically affected by the categorial synthesis of intuitions in the concept of the object, which applies to all intuitions given objectively in space (and therefore that the deduction is completed in §24). This is not so, however, as **all intuitions given to empirical consciousness** must be shown to be synthetically subject to the categories (not just intuitions which are already referred to objects, *a priori*). Thus for their synthetic *a priority* the categories must be shown to be necessary as well as sufficient underlying conditions for the empirical unity of consciousness involved in perception. The sensible manifold is given prior to, and independently of, any synthesis by the understanding (cf.B145), and therefore the possibility is left open that a manifold given in undetermined sensibility will be unifiable in empirical consciousness in inner sense in time, without necessarily conforming to the categories. In the deduction so far, only those intuitions combined through the synthesis of apprehension as an aspect of the transcendental representation of the object have been proved to be

subject to the categories.

It follows that as the categories have not been shown to be **necessary for the empirical unity of consciousness involved in perception**, they have not been shown to be *a priori* valid for all intuitions
which can be given to empirical consciousness, that is, for all objects of our senses, which may possibly be
objects of empirical synthesis alone. (Which is to say that although the categories have been shown to
apply *a priori* to all intuitions given in both transcendental and empirical consciousness, no argument has
yet been given to show that intuitions cannot be given in empirical consciousness alone; namely intuitions
combined into a sensible unity in sensible space and time without necessarily conforming to the categories.)

Therefore for the proof of their *a priori* validity for all objects of experience the categories must be shown to be necessary for the synthesis of apprehension, which makes the empirical unity of consciousness involved in perception possible. Kant has to show how the categorial synthesis in the concept of the object can combine sensibility in such a way as to prescribe necessary unity to all intuitions given to empirical consciousness. To this end the categories must be shown to apply as universals, in the pure forms of intuition, necessarily underlying all intuitions given to the empirical subject. Therefore in §26 Kant provides the proof of the necessity of the categories for the synthetic unity of space and time required for perception. The categorial synthesis which combines outer intuitions in general in objective space, through the transcendental concept of the object, is shown to be necessary for the sensible unity of intuitions as they appear to the empirical subject, and therefore the transcendental synthesis is both sufficient and necessary for the empirical unity of consciousness involved in perception.

Thus Kant sees his task as proving the synthetic *a priority* of the categories as objectively real concepts, which are therefore applied (as transcendental syntheses) in pure intuition in time in general, as the *a priori* underlying ground of all perception. - Kant states that he has to explain the possibility of knowing *a priori*, by means of the categories, whatever objects may present themselves to our senses, "..not indeed in respect of the form of their intuition, but in respect of the laws of their combination, and so, as it were, of prescribing laws to nature, and even of making nature possible. For unless the categories discharged this function, there could be no explaining why everything that can be presented to our senses must be subject to laws which have their origin *a priori* in the understanding alone"(B160). This must include the empirical laws of nature (as "special determinations" of the categories) for which, if they are held to be necessary laws in themselves external to the subject there is no explanation as to why they must conform to our understanding. But if they are necessary laws of our understanding independently of our sensibility they are mere forms of thought with no objective reality or validity. Thus the categories, through their necessary relation to sensibility as transcendental imagination, must be able to prescribe laws to nature - that is to experience in general, in order to have objective reality as synthetic *a priori* concepts, valid of all objects of possible experience.

(iii) Pure intuition implies the categories

Kant's proof of the necessity of the categories for the empirical synthesis of apprehension proceeds:

First of all I may draw attention to the fact that by "synthesis of apprehension" I understand that combination of the manifold in an empirical intuition, whereby perception, that is, empirical consciousness of the intuition (as appearance), is possible. In the representations of space and time we have a priori forms of outer and inner sensible intuition; and to these the synthesis of

apprehension of the manifold of appearance must always conform, because in no other way can the synthesis take place at all. But space and time are represented *a priori*, not merely as *forms* of sensible intuition, but as themselves *intuitions* which contain a manifold [of their own], and therefore are represented with the determination of the *unity* of this manifold (*vide* the Transcendental Aesthetic). Thus *unity* of the *synthesis* of the manifold, without or within us, and consequently also a combination to which everything that is to be represented as determined in space or in time must conform, is given *a priori* as the condition of the synthesis of all *apprehension* - not indeed in, but with these intuitions. This synthetic unity can be no other than the unity of the combination of the manifold of a given *intuition in general* in an original consciousness, in accordance with the categories, in so far as the combination is applied to our *sensible intuition*. All synthesis, therefore, even that which renders perception possible, is subject to the categories;... (B161)

Thus the unity of space and time as intuitions is "the *a priori* condition of the synthesis of all apprehension - not indeed in, but with these intuitions." That is, the empirical synthesis of apprehension does not take place **in the already united intuitions of space and time** (as in §10) - but with these intuitions; space and time as intuitions are produced by this combined act of synthesising the pure forms of space and time along with the empirical synthesis of apprehension. And the unity which is the ground for this combined synthesis can only be "the unity of the combination of the manifold of a given intuition in general in an original consciousness, in accordance with the categories, in so far as the combination is applied to our sensible intuition."

In other words the unity thought through the productive synthesis of the transcendental imagination, in the pure forms of space and time, gives an underlying *a priori* categorial unity to the synthesis of apprehension. And this categorial unity of the pure forms of space and time is required to make them into pure intuitions. As argued previously, the only way of retaining the permanence of space along with the temporality of successive empirical representations, in the combined pure and empirical synthesis of apprehension, is by (transcendentally) making this synthesis into the concept of something permanent in space which undergoes causal changes in time, through the categories of substance and cause. I.e. to repeat an earlier quote - "Transcendental logic brings to concepts not representations but the pure synthesis of representations" (B104).

Therefore through transcendental apperception, using the relational categories as pure concepts of the necessary unity of space and time, the pure sensible forms of space and time are combined into the pure sensible intuitions of space and time. In other words the categorial syntheses in the pure forms of space and time (which ground the transcendental reproductive synthesis) also produce the *a priori* concepts of space and time, as the infinite possibility of a synthesis in the three dimensions of space and one dimension of time, which underlie (synthetically *a priori*) the pure forms of space and time as they appear to empirical consciousness, and thereby make them into pure sensible intuitions.

As well as grounding empirical space and time, pure intuition, Kant holds, also grounds our constructions of pure mathematics and geometry. The *a priori* forms of intuition as opposed to *a priori* formal intuition lack the representation of the arrow of time and infinity of space which mathematics requires. "Space represented as *object* (as we are required to do in geometry)" [and therefore not as an empirical object but

as an *a priori* object, that is, space in general, underlying empirical space] "contains more than mere form of intuition; it also contains *combination* of the manifold, given according to the form of sensibility, in an *intuitive* representation, so that the *form of intuition* gives only a manifold, whereas the *formal intuition* gives unity of representation" (B161fn.).

For example without synthetic unity in its representation space cannot be given as a continuum, as there is nothing to tie together (objectively) the spatial aspects of two appearances which are given in succession (e.g. when turning the head), without transcendentally putting these appearances under the category of community (as a function of transcendental thought), and thereby providing the continuity of space along with the succession of time. Whether this synthetic unity of the pure forms of space and time provides the pure intuition of space or the pure intuition of time depends (I would suggest) on whether it is thought as the *a priori* form of the outer intuition of objects in space, or as the *a priori* form of the inner intuition of the empirical subject in time. (And therefore, perhaps, as the pure intuition of "space/time" as the *a priori* form of the transcendental subject.)

Thus pure intuition, as a combined pure apprehensive and apperceptive synthesis, is the *a priori* form of empirical space and time, but when taken in abstraction from all empirical content it is a pure synthesis in time in general in the transcendental subject. Therefore although empirical intuition contains sensibility or receptivity only, pure intuition contains both spontaneity and receptivity, that is both understanding and sensibility, which are in necessary relation to each other in the productive imagination, which, says Kant, is "determinative" rather than just "determinable" like sensibility (cf. B152), and can therefore determine receptive sensibility (as it is given in empirical consciousness) in accordance with the unity of apperception.

In the Aesthetic Kant is not in the position to discuss this *a priori* synthetic unity required of pure intuition, which is provided by the categories, because the necessary relation between the pure understanding and pure sensibility prior to all empirical thought is yet to be introduced (in the Analytic), so the unity required of space and time as pure intuitions is recognised by Kant in the Aesthetic, without the possibility of this unity being explained until the Analytic:

In the Aesthetic I have treated this unity as belonging merely to sensibility, simply in order to emphasise that it precedes any concept, although, as a matter of fact, it presupposes a synthesis which does not belong to the senses but through which all concepts of space and time first become possible. For since by its means (in that the understanding determines the sensibility) space and time are first *given* as intuitions, the unity of this *a priori* intuition belongs to space and time, and not to the concept of the understanding (cf.§24) (B161fn.a).

Thus the categories unify empirical intuitions (as a unity for the understanding) by uniting their pure manifold in a pure concept of the object (as the "transcendental content" of the concepts of cause and substance etc.), and this unity therefore belongs to the concept of the understanding. Whereas the same transcendental synthesis through the categories provides unity to the pure forms of space and time by uniting them as pure sensible intuitions - so the unity belongs to space and time rather than to the concept of the understanding.

Therefore Kant holds that all synthetic *a priori* concepts (which require universal characterisation in both understanding and sensibility) are thought in pure intuition, as transcendental synthesis, i.e. in the pure

productive synthesis of the form of space together with time, which takes place in time in general, necessarily underlying all perception.

To return to Kant's arguments in §26 - The fact that the categories (as qualitative unity) are necessary for the pure intuitions of space and time, as the *a priori* forms of outer and inner intuition, proves that they are necessary for all perception. Therefore there can be no perceptions of objects in space and time which do not conform to the categories - e.g. objects having no causal relations, which Kant discussed the possibility of in A90. Thus Kant shows in step two of the deduction that the synthesis of apprehension, which makes perception possible, is an aspect of the transcendental representation of the object, and is therefore grounded in the pure understanding and categories. I.e. "..the synthesis of apprehension, which is empirical, must necessarily be in conformity with the synthesis of apperception, which is intellectual and is contained in the category completely *a priori*. It is one and the same spontaneity, which in the one case, under the title of imagination, and the other case, under the title of understanding, brings combination into the manifold of intuition" (B162 fn.b).

The fact that we seem able to experience intuitions as purely sensible unities, however, in the pure intuitions of space and time, without their needing to be thought through concepts of objects, gives rise to scepticism about the claimed necessity of the categories for sensible intuition. - Why can't the synthesis of apprehension alone, through which (on Kant's thesis) the imagination unifies the pure and empirical sensible manifold, be sufficient for sensible intuitions to be presented to us, as sensible determinations of the subject, without pure concepts of the understanding being required. Kant's argument in §26, however, shows that the apperceptive synthesis is a necessary underlying aspect of the apprehensive synthesis whether the apprehended intuitions are referred to objects or not, because of the necessity of the underlying categorial synthesis for the unity of the pure sensible intuitions of space and time, required for the empirical unity of consciousness involved in perception.

(iv) Kant's two perception arguments

In §26 Kant gives two examples to demonstrate that the synthetic unity provided through the categorial synthesis (as qualitative unity) is required for the pure intuitions of space and time, and therefore for all perceptions in sensible space and time.

When, for instance, by apprehension of the manifold of a house I make the empirical intuition of it into a perception, the *necessary unity* of space and of outer sensible intuition in general lies at the basis of my apprehension, and I draw as it were the outline of the house in conformity with the synthetic unity of the manifold in space. But if I abstract from the form of space this same synthetic unity has its seat in the understanding and is the category of the synthesis of the homogenous in intuition in general, that is, the category of *quantity*. To this category therefore, the synthesis of apprehension, that is to say, the perception, must completely conform (B162).

In other words, through the necessary unity of space I perceive the house as a unity in space rather than as a succession in time along with my views of it, e.g. when I turn my head. But this necessary unity of space, in which I place my intuition of the house, has its *a priori* ground in the categories, e.g. in the category of quantity, thought in pure intuition in time in general, to which the synthesis of apprehension must

completely conform, otherwise no unity is possible through the synthesis, and therefore no perception is possible.

Thus rather than our concept of the house as a quantity of matter in space being conditional upon the unity of space which is given in perception, the unity of space (and therefore the synthesis of apprehension and the possibility of perception) is conditional upon the pure concept of the understanding, e.g. the category of quantity.

When, to take another example, I perceive the freezing of water, I apprehend two states, fluidity and solidity, and these as standing to one another in a relation of time. But in time, which I place at the basis of the appearance [in so far] as [it is] inner *intuition*, I necessarily represent to myself synthetic unity of the manifold, without which that relation could not be given in an intuition as *determined* in respect of time sequence. Now this synthetic unity, as a condition *a priori* under which I combine the manifold of an *intuition in general*, is - if I abstract from the constant form of *my* inner intuition, namely time - the category of *cause*, by means of which, when I apply it to my sensibility, I determine *everything that happens* in accordance with the relation which it prescribes, and I do so *in time in general*. Thus my apprehension of such an event, and therefore the event itself, considered as a possible perception, is subject to the concept of the *relation of effects and causes*, and so in all other cases (B163).

In other words I cannot apprehend a necessary time direction (in the perception of water turning into ice over time) through the subjective order of succession in which appearances enter consciousness, which could arbitrarily be taken as either a forward or backward order of time. For example through subjective apprehension alone a backward and forward apprehension of space could equally well be taken as a backward and forward apprehension of time. The consciousness of a necessary time direction, Kant holds, is only possible through the *a priori* synthetic unity provided by the category of cause, as a pure concept of necessary succession in time.

Thus through transcendental apperception, which underlies empirical apprehension, we can combine the *a priori* sensible form of time into the *a priori* synthetic unity of time. The empirical unity of self-consciousness requires that all appearances are apprehended in a necessary time direction, and this necessary time direction is grounded *a priori* in the category of cause. However it makes Kant's argument easier to comprehend if it is borne in mind that the category of cause, and thus the *a priori* synthetic unity of time in pure intuition, is thought in the pure forms of time and space together. I.e. the category of cause, thought in combination with the category of substance, contains the necessary synthetic unity of both time and space (as the *a priori* underlying ground of the empirical synthesis of apprehension).

Thus for sensible appearances given in the pure intuitions of both space and time (as in the example of the perception of water turning into ice) their necessary time direction in inner intuition (in the empirical subject) presupposes a combined categorial synthesis in the pure forms of both time **and space**, through pure apperception. In other words in so far as it is in the *a priori* form of space the perception of water turning into ice must comply with the necessary unity of space, and therefore with the category of substance, and in so far as it is in the *a priori* form of time it must comply with the necessary unity of time, and therefore with the category of cause.

Thus the apprehension of sensible appearances in a determinate time sequence presupposes a transcendental synthesis through the relational categories, in the pure forms of both space and time, as the *a priori* underlying ground, e.g. of the perception of water turning into ice, which is therefore in the pure intuition of space in so far as it is thought, through combined transcendental and empirical syntheses, as an outer intuition of the object, and in the pure intuition of time in so far as it is thought, through combined transcendental and empirical syntheses, as inner intuition of the empirical subject. (And therefore, I would suggest, in the pure intuition of "space/time" in so far as it is thought, through transcendental synthesis and the categories, as inner intuition of the transcendental subject.)

It follows that - "My apprehension of such an event, and therefore the event itself, considered as a possible perception, is subject to the concept of effects and causes, and so in all other cases" (B163). That is, when I think the concept of cause in pure intuition (and therefore along with the concept of substance), I am able to determine everything that happens in accordance with this *a priori* law of synthesis, because the category of cause (along with the category of substance) is thought in pure intuition in time in general, as the *a priori* underlying ground of all perception.

Therefore sensible appearances can only be given in a necessary time order because the synthetic unity of time is thought through the category of cause, in pure intuition. Thus, as with the previous spatial example, we are not given, through perception, a necessary time order in which appearances follow each other in regular sequences, leading to the concept of cause through subjective associations. Rather, contrary to Hume, the appearances can only be perceived to follow each other in a necessary time order through the category of cause, thought in pure intuition in time in general.

Thus Kant's two perception arguments prove that the categories, as transcendental syntheses in the pure forms of intuition, are necessary for the synthetic unity of space and time required for perception, and are therefore necessary for experience, as knowledge through connected perceptions (which is consequently a **necessary** connection of perceptions, requiring both empirical and transcendental synthesis). Therefore the categorial synthesis of the manifold in the 'concept' of the object, already shown (in §24) to be sufficient for the possibility of experience, and objects of experience (through the effect of figurative synthesis on inner sense), is also shown to be their necessary condition. Meaning that all objects of any experience possible for us are subject to the *a priori* categories.

Kant's main aim of §26, to prove the objective reality of the categories as synthetic *a priori* concepts, which apply universally to objects of experience, is therefore addressed by the fact that the categories are a necessary aspect of pure intuition. As the *a priori* categorial synthesis (§§20 - 24), in providing the synthetic unity of a given outer intuition in general in the formal concept of the object, is at the same time necessary for the synthetic unity of the pure intuitions of space and time, to which all perception is subject, it follows

¹⁵ See "The Analogies of Experience": - "The principle of the analogies is 'Experience is possible only through the representation of a necessary connection of perceptions' "(B219). And - (*Proleg.* 2nd part, sec 22) - "Experience is the synthetic connection of perceptions in consciousness in so far as this connection is necessary." Thus the outcome of the deduction of the categories is that empirical experience, both as a knowledge of the object and as a knowledge of the subject, entails a transcendental synthesis of the sensible manifold through the categories (in pure intuition) as the *a priori* underlying ground of empirical synthesis in inner sense in time. It follows (Proleg.) that empirical judgments made in experience (in so far as the latter is already a necessary connection of perceptions, transcendentally combined into a synthetic unity through the relational categories - for the possibility of perception) can be divided into "judgments of perception"- i.e. judgments of empirical synthesis (applied to objects of combined empirical and transcendental synthesis), e.g. "bodies are heavy"; and "judgments of experience"- i.e. judgments of transcendental synthesis (requiring the *a priori* categories) as judgments asserting empirical laws of objects of combined empirical and transcendental synthesis, e.g. "The heat of the sun causes the warmth of the stone," which, as a "special determination" of the category of cause, is an objectively valid or necessary judgment (as an empirical judgment), without being an *a priori* judgment in so far as it is an actual empirical causal law, which requires experience. (This interpretation of Kant's "judgments of perception" ("judgments of experience" distinction differs from that of Henry Allison, but is compatible [I believe] with a view such as that of Michael Friedman).

that the categorial synthesis in the concept of the object is the synthetic *a priori* ground of the unity of all intuitions given to empirical consciousness, and can therefore "prescribe laws to nature."

To sum up the results of §26:-The *a priori* categories as the conditions of the possibility of objects of intuition (as objects of transcendental synthesis) step one, are also the conditions of the possibility of objects of experience (as objects of empirical synthesis) step two, because experience presupposes (for the possibility of perception), the *a priori* unity of the pure intuitions of space and time, which itself presupposes the transcendental synthesis through the categories. Thus an underlying categorial synthesis in the concept of the object is both sufficient (§24) and necessary (§26) for the possibility of experience, and therefore has *a priori* validity for all objects of experience. [With a proviso I give later in this thesis of the necessary addition to Kant's arguments of the pure categories and syntheses of pure practical reason.]

Therefore the role of the categories as transcendental determinations of objective space (i.e. as transcendental syntheses in the pure forms of space and time in the pure concept of the object, which thereby provide the *a priori* synthetic unity of space, as the form of outer intuition), is presupposed by their role as "transcendental determinations of time" (of the Schematism chapter) which provide the *a priori* synthetic unity of time as the form of inner intuition. Since "All our knowledge is finally subject to time, the formal condition of inner sense" (A99), the completion of the deduction required that the *a priori* validity of the categories for all intuitions, in so far as they are represented as objects, by pure apperception (prior to all thought), be translated into their *a priori* validity for all intuitions in so far as they are given as sensible representations in empirical consciousness, in inner sense in time. Thus a schema of a pure concept of the understanding needs to be a transcendental determination of time rather than just a transcendental determination of space. (A point which seems to be lost on the many critics of the Schematism chapter.)

5. Conclusions From The Two Step Deduction

The fact that sensible intuitions can be given as a unity in consciousness, i.e. as "my representations" (of objects), prior to any accompaniment by the "I think", shows that as well as having a priori sensible conditions (the formal conditions of space and time) intuitions of objects in space and time also have a priori intellectual conditions - the pure synthesis of the manifold in a formal concept of the object, through a necessary relation of sensibility to the "I think," ".. to be entitled the original synthetic unity of apperception" (B156). This transcendental unity of apperception, says Kant, is an objective unity of consciousness, because it is "that unity through which all the manifold given in an intuition is united in a concept of the object" (B140). That act of understanding, however, by which the manifold of given representations ("be they intuitions or concepts") is brought under one objective apperception (that is, is combined in a formal concept of the object) is the logical function of judgment (§19). And the categories are these functions of judgment in so far as they determine the manifold of a given intuition in a formal concept of the object, prior to all empirical thought. Therefore the manifold of a given intuition, as a unity in transcendental consciousness, is necessarily subject to the categories. It follows (§21) that the empirical consciousness of an intuition through which an object is given is subject to the categories in a pure selfconsciousness a priori, and "a beginning is made of a deduction of the pure concepts of the understanding" (B144).

Only a beginning is made, I contend, because the deduction aims to prove the *a priori* validity of the categories for all intuitions which can be given to empirical consciousness, and therefore their validity as

necessary judgments, not just as necessary forms of judgment, and as synthetically necessary judgments, not just analytically necessary judgments. The categories, as well as being logical functions of judgment for pure apperception, also in themselves "serve for concepts" (*Proleg.* - 2nd part, sec 22) and are therefore not just the means for unifying representations objectively in a consciousness, through objectively valid forms of judgment, but also serve for objectively valid judgments¹6 (necessary judgments, in Kant's terms) applying to intuitions in a consciousness in general. They apply analytically to intuitions in transcendental consciousness, which is constituted by the categorial combination of intuitions in a concept of the object. Thus all intuitions given as objects in outer intuition in space are subject to the categories, because they owe their objectivity to an underlying categorial synthesis in pure intuition. Therefore the **empirical consciousness of an intuition through which an object is given is synthetically subject to the** *a priori* **categories.**

However Kant has to show that the empirical consciousness of a given intuition *in general* is subject to the categories, which, although they are not analytically necessary judgments in relation to empirical consciousness, are synthetically necessary in relation to it. Which Kant intends to prove in step two of the deduction, by showing that the categories as conditions for the transcendental unity of consciousness are also necessary (in addition to being sufficient) conditions for the empirical unity of consciousness involved in perception, because they are necessary for the pure intuitions of space and time. Therefore all intuitions given to empirical consciousness are subject to an underlying categorial synthesis in pure intuition, as a synthetic *a priori* determination of sensible intuition in conformity with the categories.

Thus in §26 "from the mode in which the empirical intuition is given in sensibility" that is, as it appears to empirical consciousness as a sensible unity in sensible space and time, its unity is shown to be "no other than that which the category (according to §20) prescribes to the manifold of a given intuition in general." That is, is no other than that which the category, represented universally in pure intuition, prescribes to a given outer intuition in general, through the transcendental concept of the object, - which thereby also determines (synthetically *a priori*) the unity of a given intuition in general as it appears to empirical consciousness.

Kant's statement, at the conclusion of §21, that (only) a beginning is made of a deduction of the pure concepts of the understanding can therefore be understood, it seems to me, by recognising two further requirements of the deduction:- (1) The objective reality of the categories, not just as necessary forms of judgment but as necessary judgments must be demonstrated. Kant has to show that the categories can be applied to intuition in such a way as to apply to empirical intuitions in general, as well as to a given intuition in the particular, subsumed under the category. Therefore as they have their source in the understanding and not in perception, Kant must, in explaining the application of the categories to intuition, abstract from the mode in which the *empirical* intuition is given in sensibility, that is, as it appears to empirical consciousness as a unity in sensible space and time, and concentrate on the unity the category supplies to the intuition in the mode in which it is given in *pure* intuition, through a pure understanding with a necessary relation to sensibility. This is Kant's strategy in §24, in his conception of the transcendental imagination, which, through productive syntheses in the pure forms of intuition, which underlie all empirical intuitions, can prescribe unity to objects of intuition in general. (2) However, although §24 demonstrates how the *a priori* categories, as

¹⁶ Henry Allison equates the "objective unity" of judgments with "objectively valid judgments," consequently ignoring Kant's "necessary judgments"; which include, in my view, both the *a priori* categories which make experience possible, and the "judgments of experience" (rather than perception) which express empirical laws of nature, as "special determinations" of the categories.

productive syntheses of the transcendental imagination, in the pure forms of intuition, can prescribe that all intuitions given objectively in outer intuition in space are in necessary conformity with them, a further step of the deduction is still required. As the deduction has to explain how we can know synthetically *a priori* that all intuitions given to the empirical subject (in inner sense in time) will conform to the categories, more is needed than just to show that all intuitions given as objects in outer intuition in space must conform to them.

Thus all the manifold of an intuition "which I call mine" is combined by pure apperception in a formal concept of the object (through the categories), and this explains how intuitions given as my representations of objects (prior to all thought) are subject to the categories, but not how intuitions which are not yet represented as objects, but as sensible determinations of the subject, are necessarily subject to them; which is the claim of our synthetic *a priori* judgments - that is, that all affections of our sensibility in inner sense in time will conform to our concepts (through the categories) of objects affecting us.

Therefore for the completion of the deduction pure apperception must be shown to be the *a priori* underlying ground of the empirical unity of self-consciousness involved in perception, which is a knowledge of the given sensible manifold as an aspect of the empirical subject in inner sense in time, rather than as an aspect of the transcendental representation of the object, through pure self-consciousness. As transcendental apperception through the categories is conceived by Kant as grounding empirical consciousness in order to explain how we can have synthetic *a priori* knowledge, the former must be shown to be not just sufficient, but necessary for the latter. Kant must prove that the categorial synthesis in the concept of the object is necessary for the apprehensive synthesis which makes the empirical unity of consciousness possible. As it is empirical synthesis in inner sense in time which provides us (indirectly) with the objects we claim to have synthetic *a priori* knowledge of, both empirical synthesis and transcendental synthesis must be shown to be necessarily subject to the categories. Step one does not indicate "the range within which," to borrow a phrase used by Dieter Henrich, ¹⁷ empirically synthesised intuitions must necessarily conform to the categories. In §26, however, Kant aims to show that **all empirically synthesised intuitions** must also be transcendentally synthesised (through the categories) for the *a priori* unity of the pure intuitions of space and time, to which the apprehensive synthesis is necessarily subject.

Thus in step two of the deduction the transcendental synthesis through the categories (of step one) is shown to be a synthesis in general in the pure forms of intuition, which is required to make the latter, *a priori*, into the pure intuitions of space and time, and therefore necessarily underlies all intuitions given to empirical consciousness.

The problem remaining at the end of step one of the deduction is therefore that although the empirical consciousness of a given intuition, in so far as its unity is an effect or appearance of the transcendental representation of the object, is subject to the categories, this alone does not prove that the categories are *a priori* valid for all intuitions which can be given to empirical consciousness. The categories have so far only been proved to prescribe unity to those intuitions which are, or can be, united in the concept of the object through transcendental apperception. The possibility is left open that intuitions could appear as a unity in the sensible forms of space and time (to the empirical subject) without necessarily conforming to the categories, namely intuitions which cannot be brought into the transcendental unity of apperception as "my representations" through the transcendental concept of the object, but which can nevertheless be

¹⁷ In "The Proof Structure of Kant's Transcendental Deduction." Review of Metaphysics 22, pp.640 59. I therefore concur with the broad outline of Henrich's suggested proof structure.

unified as my sensible representations in inner sense in time.

This addresses Kant's concerns about the apparent possibility of sensible intuitions not being in conformity with our pure concepts, such as cause and substance, although still being given as sensible intuitions in sensible space and time (cf.A90). Thus perhaps the pure and empirical synthesis of apprehension alone is sufficient for sensible intuitions to be presented to us, without pure concepts being required. Although these intuitions could not refer to independent objects through *a priori* categories they would still (it would seem) appear as sensible intuitions in the sensible forms of space and time, and would therefore allow an empirical unity of consciousness in inner sense in time, along with a possible subjective knowledge (á la Hume) from associated intuitions. Kant therefore needs to rule out this apparent possibility of category-free intuitions, if he is to uphold the *a priori* validity of the categories for all objects of our senses.

Therefore for the *a priori validity* of the categories not just the transcendental synthesis of apperception, which relates intuitions to objects (step one), but the empirical synthesis of apprehension, which makes perception possible (step two), must be demonstrated to be necessarily subject to the categories. Kant aims to satisfy this requirement in §26, by showing that the pure categories are not just sufficient (step one), but also necessary, for pure intuition (in addition to the pure forms of intuition being necessary for the pure categories), and as a consequence that the synthetic *a priori validity* of the categories for all objects of experience is proved. [As referred to above, to achieve this requirement that the pure categories are necessary and sufficient conditions for the unity of our pure intuitions of space and time (and therefore for perception), the pure categories and syntheses of pure practical reason are also required, as I will be arguing at a later stage in this thesis.]

Thus the categorial synthesis, which combines the pure sensible forms of a given outer intuition in general in a pure concept of the object, is shown to be the very synthesis which provides the necessary unity of space and time required for perception. Meaning there is no possibility of sensible perceptions being given in sensible space and time without the underlying categories, as the pure categories are as fundamental for our perception of objects in space and time as are the pure sensible forms of intuition.

The fact that the categorial syntheses in the pure forms of intuition are a necessary aspect of the pure intuitions of space and time, which are the *a priori* forms of all empirical intuitions, proves that the categories can "prescribe laws to nature", that is, to experience in general, through synthetic *a priori* judgments in pure intuition in time in general, as the "transcendental content" of our representations of cause and substance etc.

Thus our claim in synthetic *a priori judgments* is not just that all intuitions through which objects are given will necessarily conform to the categories, but that all intuitions as they are given to empirical consciousness in inner sense in time will conform to them. Kant's strategy in step two of the deduction is therefore to show that empirical consciousness itself presupposes the categorial synthesis of the manifold in the concept of the object, for the unity of time in inner sense.

The conclusion of the two-step deduction, it has been shown above, is that the *a priori* unity of space and time, and therefore the unity of the pure and empirical synthesis of apprehension, can only be that provided by original apperception, which combines all the manifold of intuition in a concept of the object, - through the parallel transcendental and empirical syntheses, which are directed "from above" by the categories. Thus the productive synthesis through the categories, in combining the pure forms of space and time in a pure 'concept' of the object, also provides and is necessary for (with the addition of the transcendental will and its

transcendental syntheses, on my view, through the pure categories of pure practical reason) the unity of the pure and empirical synthesis of apprehension, the latter combining the empirical manifold in the sensible representation of the object, while pure apprehension, under the direction of the categories, combines the pure forms of intuition into the pure intuitions of space and time.

Thus in §26 Kant holds that he has now accomplished his aims for step two of the deduction:- it has been shown that the sensible unity of a given intuition, as it appears to empirical consciousness, can only be that which the category prescribes to the manifold of a given intuition in general, through an underlying transcendental synthesis in pure intuition. It follows that the categories have *a priori validity* for all objects of our senses, i.e. for all objects perceived in outer intuition in space and thought in inner intuition in time through the concepts of cause and substance etc. (with the "transcendental content" of the synthetic unity of the manifold in intuition in general) (cf.B105).

Therefore a judgment made in experience such as "all events have a cause" has a priori validity for all objects of experience, and Kant has shown how "subjective conditions of thought can have objective validity."

Summing up: - All intuitions, as "my representations" (of objects) prior to all thought, presuppose the a priori categories, as logical functions of judgment for pure apperception (which is constituted by this a priori combination of the manifold through the categories). "Consequently the manifold of a given intuition is necessarily subject to the categories" (B143). It follows that all intuitions through which objects are given, in the sensible mode in which they are given in empirical consciousness, are synthetically subject to the a priori categories in pure self-consciousness. To prove the a priori validity of the categories for all objects of experience, however, Kant has to show that all intuitions given to empirical consciousness are subject to the categories (not just intuitions which are already referred to objects, a priori). To this end, in §26 Kant aims to show that the categories are a necessary underlying aspect of the pure intuitions of space and time, to which the synthesis of apprehension (which makes the empirical consciousness involved in perception possible) must necessarily conform. And therefore that all intuitions given to empirical consciousness are necessarily subject to the a priori categories in pure self-consciousness. Meaning not just that the categories are necessary conditions for experience, but that they necessarily condition experience, and therefore the categories are "valid a priori for all objects of experience" (B161). Thus Kant claims to have proved that the manifold of empirical sensibility, given in the pure intuitions of space and time (Transcendental Aesthetic), is subject synthetically a priori to the categories, as pure concepts of the understanding (Transcendental Analytic).

6. A Retrospective View Of The Two Step Deduction

In seeking to legitimise our knowledge of spatio/ temporal objects affecting our senses, to which the categories necessarily apply, Kant has to provide an alternative to the view that these objects are just causal inferences from subjective experience. His goal is to prove that the categories provide synthetic *a priori* knowledge of the spatio/temporal objects affecting our senses (as well as each other) such that all affections of our sensibility in inner sense in time *must* conform to the categories.

To achieve this goal Kant has to prove not only that all objects of outer intuition in space (as objects of transcendental synthesis) are subject to the categories, but that the empirical synthesis of apprehension, which makes perception possible, is subject to this same categorial synthesis. That is, that the categorial

synthesis of the manifold in the concept of the object is necessary, not just for the relation of sensible representations to objects, but also for the relation of sensible representations to the subject. He proves this through the two steps of the deduction - step one shows that all intuitions in sensible space and time, in so far as they represent objects in objective space and time, are analytically subject to the categories; and step two shows that all intuitions in sensible space and time, in so far as they are represented as sensible affections of the empirical subject, are synthetically *a priori* subject to the categories.

Thus the Transcendental Deduction shows not just how we can have *analytic a priori* knowledge (in transcendental apperception) of the necessary relation of outer intuitions (as "my representations" prior to all thought) to the categories, through a spatio/temporal synthesis which affects us synthetically (as empirical consciousness) in inner sense in time, but how we can have knowledge of this spatio/temporal synthesis as affecting us synthetically *a priori* in inner sense in time, through the necessary effect of transcendental synthesis on inner sense, for the pure intuition of time, (and therefore both as a necessary condition of, and as necessarily conditioning, empirical experience in inner sense in time). And therefore how we can have empirical knowledge (through empirical synthesis) of spatio/temporal objects which affect us in inner sense in time, in necessary conformity with the categories, because an underlying spatio/temporal synthesis through the categories is the condition for empirical experience in inner sense in time.

Kant makes a similar three-way deduction in the *Opus postumum* - "My synthetic *a priori* knowledge as transcendental philosophy is a transition from the metaphysical foundations of natural science to physics, that is, to the possibility of *experience*." (*Opus postumum* 22:85-86, p.191). In other words it is the transition from metaphysics, which "has to do with sense objects and their system, in so far as the latter is knowable *a priori*, analytically" (cf. Ibid 22:104), to transcendental philosophy as synthetic *a priori* knowledge, and from it to physics, as the possibility of experience (cf. Ibid 22:86-87).

The deeper meaning of the deduction, however, is that through it the categories are shown to be *synthetic a priori* judgments, in pure intuition, referring empirical intuitions to the transcendental object of intuition. The categories are necessary and sufficient not just for the relation of sensible representations to a phenomenal object of figurative synthesis (i.e. to the figurative synthesis itself), but to a transcendental object of figurative synthesis, i.e. to "something in general" outside sensibility or receptivity. Although all intuitions, in so far as they are given as my representations of objects, prior to all thought, are analytically subject to the categories as logical functions of judgment, this analytic relation of intuitions to the categories presupposes an original synthesis through which the "given" manifold of sensibility is combined *synthetically a priori* through the categories, in a pure representation of the transcendental object affecting sensibility. That is, to be "my representations" in the transcendental understanding the *given sensible manifold* (containing the undetermined manifold of both outer and inner intuition), has to be brought into an objective unity of consciousness through the categories, since the sensible manifold is given "prior to and independently of" any synthesis by the understanding (B145). (Otherwise the categories would not be concepts of given objects, but concepts through which the object itself was given, making the object purely subjective to the transcendental subject of understanding.)

Therefore to be brought to the transcendental unity of apperception in the concept of the object the pure and empirical sensible manifold, as well as being combined into a sensible unity in inner sense in time for the empirical unity of self-consciousness (as the concept of the affected subject), must also be combined as outer intuition in objective space, through the categorial synthesis of the manifold in the 'concept' of the

object (to represent the affecting object). Thus the sensible manifold given to the empirical subject, in inner sense in time, is only necessarily subject to the categories if it **can**, **universally**, be combined through the categories into objective space, through the transcendental concept of the object.

However step two of the deduction proves that the given sensible manifold cannot be combined as a sensible unity in the empirical subject, in inner sense in time, without its prior combination in objective space, through the categories (in the 'concept' of the object in general affecting sensibility). And therefore the categories, as *a priori* judgments in pure apperception, in time in general (referring given intuitions to the transcendental object of intuition), are the synthetic *a priori ground* of the synthesis of apprehension in inner sense in time.

7. The Relation Of The Categories To The Logical Forms Of Judgment

Thus Kant holds that in the end all synthesis, whether sensible or intellectual, is necessarily grounded in the underlying *a priori* categories. This must include the "synthesis of recognition" in an empirical concept (of the A deduction), i.e. combination through the logical forms of judgment of general logic (cf.A125). In §10, in the Metaphysical Deduction of the Categories, Kant writes:

The same function which gives unity to the various representations *in a judgment* also gives unity to the mere synthesis of various representations *in an intuition*; and this unity, in its most general expression, we entitle the pure concept of the understanding. The same understanding, through the same operations by which in concepts, by means of analytical unity, it produced the logical form of a judgment, also introduces a transcendental content into its representations, by means of the synthetic unity of the manifold in intuition in general. On this account we are entitled to call these representations pure concepts of the understanding, and to regard them as applying *a priori* to objects - a conclusion which general logic is not in a position to establish. (B105)

In spite of the order of wording in this passage the analytical unity by which the understanding "produced the logical form of a judgment" can only be understood, (it seems to me) as being subsequent to, rather than prior to, the synthetic unity by which the understanding "introduces a transcendental content into its representations."

Thus the paragraph preceding the one in question asserts "By means of analysis different representations are brought under one concept - a procedure treated of in general logic. What transcendental logic, on the other hand teaches, is how we bring to concepts, not representations, but the pure synthesis of representations"(B104). And at the beginning of the B deduction - "It will easily be observed that this action (combination) is originally one and is equipollent for all combination, and that its dissolution, namely analysis, which appears to be its opposite, yet always presupposes it. For where the understanding has not previously combined, it cannot dissolve, since only after being combined by the understanding can anything that allows of analysis be given to the faculty of representation" (B130).

Therefore the original synthetic unity produced by the categories is required for the unification through the logical forms of judgment and analytical concepts of general logic. Thus judgments through analytical concepts presuppose the synthetic unity provided by the categories, not just for the prior synthetic combination which "all analysis requires" but for the very time order in which the judgments of general logic

occur in inner sense. Thus the mixed tenses of the passage - "..by means of analytical unity [the understanding] produced the logical form of a judgment also introduces a transcendental content into its representations." could be due to the fact, I would suggest, that the logical form of a judgment was produced by the understanding in the order of time, whereas the synthetic unity provided by the categories, which the understanding introduces, is timeless.

Thus the passage in question can perhaps be more accurately phrased as "The same understanding, through the same operations by which, in concepts, by means of analytical unity, it produced the logical form of a judgment also introduces, through 'original acquisition' in pure intuition (in time in general), the transcendental form of an intuition, by means of the synthetic unity of the manifold in intuition in general, which thereby introduces a transcendental content into its representations (of cause and substance etc.)."

Kant points out that a transcendental argument shows, of a proposition known to be true *a priori*, what conditions must be fulfilled for such transcendental knowledge to be possible. Thus a transcendental argument makes clear what the precise meaning is of the proposition which is known to be true. E.g. Kant holds that we know *a priori* that the propositions of Euclidean geometry are true, but argues that this is only possible if space is the *a priori* form of outer sense, i.e. if the subject itself determines the spatial characteristics of the objects it perceives.¹⁸

Thus to show how we can have synthetic *a priori* theoretical knowledge, e.g, that all events must have a cause, the deduction proves that this is possible because productive synthesis through the categories is a necessary underlying aspect of the pure intuitions of space and time, which are the *a priori* forms of all empirical intuitions, and the categories can therefore "prescribe laws to nature." That is, the subject, in supplying the space and time in which empirical intuitions appear, must supply not just the *a priori* sensible forms of space and time, but also their *a priori synthetic unity*, through the categories, which are just as necessary for the possibility of intuitions in space and time as are the pure sensible forms of intuition, and therefore apply *a priori* to all intuitions; and In so doing provide the crucial reference to independent reality, through the transcendental object, or transcendental referent, of the intuition - as "something in general" outside sensibility or receptivity.

¹⁸ cf. "Transcendental arguments" p.354, in *Dictionary of Philosophy*, Anthony Flew, Ed. consultant.

§3: The Categories As A priori Thought Versus The Categories As A priori Knowledge

1. §10 (in the 'Metaphysical Deduction of the Categories') As Approached From The Aesthetic; And Introduction To The Schematism

When approached from the Transcendental Aesthetic, however, rather than retrospectively from the Transcendental Deduction of the Categories (as in the previous chapter), §10 can only be interpreted according to the findings of the Aesthetic, together with the apprehensive imagination Kant holds conditions all our knowledge. Thus §10 can initially only be interpreted from the perspective of the empirical subject in inner sense in time, to which sensible appearances contained in the pure intuitions of space and time (described in the Aesthetic as sensible determinations of the human mind) are given receptively in perception, but which require the addition of concepts of the separate faculty of understanding for any *knowledge* to be possible.

§10, as well as giving the clue to the discovery of all pure concepts of the understanding from the logical forms of judgment, also gives the clue as to how our pure concepts can provide *a priori* synthetic knowledge (as well as empirical knowledge) of objects intuited in space and time. Kant states that transcendental logic "has lying before it a manifold of *a priori* sensibility, presented by Transcendental Aesthetic, as material for the concepts of pure understanding" (A77). The pure intuitions of space and time are at the same time conditions of the receptivity of our mind - conditions under which alone it can receive representations of objects, and which therefore must also always affect the concept of these objects. For these objects to be known, however, the spontaneity of our thought requires that the manifold be taken up and connected, through a process of synthesis (largely an unconscious but indispensable "..function of the soul..." [cf. A78]).

To bring this synthesis to concepts, states Kant, is a function of the understanding, through which we first obtain knowledge properly so-called. Although general logic can transform given representations into concepts by a process of analysis, before we can analyse our representations they must first be given *determinately* for concepts and judgment, and therefore no concepts containing content can first arise by analysis.

Synthesis of the pure and empirical sensible manifold is first required; the pure and empirical synthesis of apprehension must unite the pure intuitions of space and time, and the appearances contained in them, in one act of synthesis. In order for empirical intuitions to be determinate for judgment they must be combined as a unity in time and space together, not just in one or the other. However this requires that the temporal apprehensive synthesis is brought to the pure concept of an object in general, through the categories, as the logical forms of judgment insofar as they combine intuitions determinately for judgment.

Thus appearances can only be *apperceived* or *thought*, not *apprehended*, in both space *and* time, through the synthesis of apprehension being brought to the concept of something permanent in space which changes in time, through the categories of substance and cause. Kant (to repeat an oft-quoted proposition) states that while general logic brings different representations under one concept by means of analysis, transcendental logic brings to concepts not representations, but the pure synthesis of representations (cf.B104). And this pure synthesis can be represented universally in the pure intuitions of space and time in their universal aspect, in time in general, as with our synthetic *a priori* knowledge of mathematics (Transcendental Aesthetic). Thus "Pure synthesis represented in its most general aspect gives the pure

concept of the understanding" - which grounds a priori all intuitions given determinately for judgment.19

Kant describes pure synthesis as "that which rests on a basis of *a priori* synthetic unity" (cf.B104). Thus our counting is a synthesis according to concepts, as it is based on a common ground of *a priori* synthetic unity, e.g. the decade, which renders the unity of the synthesis of the manifold *a priori necessary*. The pure synthesis of appearances in space and time is likewise an *a priori* synthesis according to concepts - of an object of sensible intuitions in general - thereby providing the synthetic unity of the pure synthesis, in combining empirical intuitions determinately for judgment.

2. Quantitative Versus Qualitative Unity Of The Categories

Thus the categories, as *quantitative* unity, are applied to intuitions in space and time by providing the synthetic unity of the pure and empirical synthesis of apprehension, from the perspective of the empirical subject in inner sense in time, and are grounded as universals in the necessary unity of time. The pure intuitions of space and time however (which are the starting point of §10, and are described in the Aesthetic as "prior to all concepts") are found in the transcendental deduction to already presuppose the categories, as a *qualitative unity* in transcendental apperception, prior to any application of concepts by the empirical subject. In transcendental apperception the understanding is in a necessary relation to sensibility in the transcendental imagination, which, through the qualitative unity of the categories, combines the pure forms of intuition in the pure representation of the transcendental object (as "something in general" outside sensibility or receptivity). I.e. through an intellectual synthesis of the imagination which is prior to all thought in the empirical subject, and which (as figurative synthesis) determines the conformity to the categories (as quantitative unity) of all intuitions given to empirical consciousness - through the necessary effect of figurative synthesis on inner sense, in determining the sensible unity of space and time.

Therefore the quantitative unity/application of the categories (§10 and the Schematism) presupposes their qualitative unity in transcendental apperception, as the *a priori* underlying ground of the necessary unity of time in which their quantitative unity is grounded, and the necessary unity of space which contains the empirical intuitions to which they are applied.

Thus there is more than one subsumption of intuitions under the categories as "pure synthesis represented universally" - first ontological in the transcendental unity of apperception (which itself has two roles for the categories as universals - namely as analytic and synthetic *a priori* principles), then epistemological in the empirical subject, i.e. as logical functions of judgment which are thought in their universal aspect in the necessary unity of time, applying synthetically *a priori* to all objects intuited in space, in which sensibility and understanding are separate but co-operating faculties.²⁰ There are also three applications or descriptions of apprehensive synthesis: - 1) Its role in transcendental apperception, as an

¹⁹ With the hindsight of the Transcendental Deduction and Schematism however, it can be seen that §10 (when approached from the Aesthetic) approximates only the final stage given in the Schematism, of the explanation of the manner in which our pure concepts can relate *a priori* to objects, i.e. the categories as pure concepts of the temporal synthesis of empirical intuitions in space and time, grounded *a priori* and universally as transcendental determinations of time. The transcendental deduction shows that earlier stages of this explanation describing transcendental conceptualisation are also required, as discussed in previous sections. - Which show how we can have necessary knowledge of *independent* objects, rather than just of appearances in a subjective space and time in the empirical subject, with only a problematic objective grounding as transcendent noumena. - Which is all that can be obtained at the stage of §10, showing the fallacy in modelling the transcendental deduction too closely on the metaphysical deduction.

²⁰ Note: in relation to the reference to Wolfgang Carl in the Introduction (p.7, above) that therefore both the 'ontological' and 'epistemological' interpretations he gives of Kant's statement - "The condition of any apperception is the unity of a thinking subject; from that comes the connection (of the manifold) according to a rule" referred to in Carl's "Early drafts of Kant's Deduction of the Categories," are appropriate, and required, as applying to either transcendental or empirical apperception respectively.

aspect of the categorial synthesis of the manifold in the 'concept' of the object. The transcendental imagination *contains* understanding and the categories as well as the apprehensive imagination, as one act. Sensible intuition is the medium of transcendental apperception, not separate from it as its object, as in empirical apperception (which the transcendental deduction shows is the *appearance* of transcendental apperception). 2) The apprehensive imagination in its role in perception, as the effect of figurative synthesis on inner sense (providing our empirical consciousness of being affected by objects), which the understanding of the empirical subject brings to concepts as a separate faculty. - Thus in perception empirical intuitions appearing in the pure intuitions of space and time are receptively given to empirical consciousness, through the effect of figurative synthesis on inner sense, but require the *accompaniment* of the understanding in the empirical subject for any *knowledge* to be possible. I.e. 3) The apprehensive synthesis in inner sense in time in its role in the cognition of given appearances in space and time, which requires the accompaniment of the categories as quantitative unity (grounded in their schemata as transcendental determinations of time) for its synthetic unity.

Therefore from the point of view of the empirical subject "pure synthesis represented universally" means that the synthetic unity of the pure apprehensive synthesis of intuitions, through the logical forms of judgment in their role in determining intuitions for judgment, and thus combining them determinately in space and time, and grounded universally as transcendental determinations of time, gives the pure concept of the understanding, which as quantitative unity is required for our *knowledge* of the objects intuited in space and time.

3. The Necessary Unity Of Time As Grounded In The Qualitative Unity Of The Categories

In the transcendental unity of apperception, however, the transcendental imagination and the atemporal productive synthesis through the categories (as qualitative unity in the pure representation of the transcendental object) provides the *original* application of the categories as transcendental determinations of time, in necessitating its unity through the effect of figurative synthesis on inner sense. Therefore the necessary unity of time, and the schematised categories grounded in it, *mediates* the ontological and epistemological application of the categories. The quantitative unity of the categories is necessary for *synthetic a priori* judgments about the objects of experience, subsequent to their qualitative unity in transcendental apperception, as the analytic and synthetic principles of apperception "..prior to all thought."

Thus from the perspective of the empirical subject in inner sense in time the forms of our intuition are external to the forms of our understanding (since the pure intuitions of space and time are given prior to all thought). But transcendentally the forms of our intuition are *internal* to the pure understanding - as its medium of thought, not its object of thought (contra John McDowell and Sebastian Rodl etc.). Rodl²¹ holds that the question of the pure *knowledge* (in pure intuition in the empirical subject) of an object of intuition through the categories, is no different from the question of the pure *thought* (in pure intuition) of an object of intuition through the categories (which according to my view is a transcendental synthesis, as qualitative unity in the transcendental subject, prior to all cognition in the empirical subject).

Rodl explicates the categories as the intellectual form of our pure intuitions - and conversely the pure intuitions of space and time as the sensible content of the categories. But he only recognises the

²¹ cf. e.g. Sebastian Rodl, University of Basel, in "Logical Form as a Relation to the Object." PHILOSOPHICAL TOPICS VOL. 34, NOS. 1 & 2, SPRING AND FALL 2006

epistemological application of the categories, in the empirical subject, not their ontological application in the transcendental unity of apperception, in which the forms of our intuition are internal to the pure understanding. Rodl states that to apply a category is to think a thought of the right kind, but on my view this is originally not a thought in the pure forms of intuition as sensible determinations of the empirical subject, but a thought in the pure forms of space and time prior to the determination of the empirical subject, and this transcendental thought refers to the transcendental object of intuition. Whereas in our *knowledge* of the objects of intuition the thought of objects through the categories is applied, as quantitative unity, to objects given *in* intuition. (In other words the pure categorial synthesis of intuitions, by the empirical subject, has as its referent the same intuitions as they are originally apperceived in outer intuition in objective space through transcendental apperception.)

Thus there are in fact three roles or descriptions of the categories as universals in pure intuition in time in general: 1) - Their role as productive syntheses in transcendental apperception, in grounding the on-going transcendental reproductive synthesis, in which it is an analytic principle that "my representations" in transcendental apperception are subject to the categories. 2) - Their role as productive syntheses in transcendental apperception in affecting *empirical consciousness* in necessary conformity with the categories, by providing the necessary unity of our pure and empirical sensible intuitions. - Meaning that the categories, as qualitative unity in transcendental apperception, are the necessary (as well as sufficient) underlying conditions for the empirical unity of consciousness involved in perception. (This is the synthetic principle of apperception of the A-deduction - i.e. all empirical consciousness is synthetically *a priori* subject to the categories in pure self-consciousness). 3) - The role of the categories as Schemata, which are grounded in the necessary unity of the pure intuition of time, and which underlie the categories' application (as quantitative unity) to objects of experience in general, as synthetic *a priori concepts*.

Therefore the role of the categories as qualitative unity in transcendental apperception is presupposed by their role as quantitative unity, in their application to given appearances by the empirical subject.

4. Both The Qualitative And Quantitative Unity Of The Categories, In One United Self-Consciousness, Are Required For Synthetic *A priori* Judgments

We have seen above that synthetic *a priori* judgments require both empirical and transcendental apperception. They therefore require the schematism as well as the analytic and synthetic principles of apperception, in an "objective unity of apperception" containing both the qualitative and quantitative unity of the categories in one united consciousness, combined through transcendental and empirical judgments as "functions of unity" among our representations. Thus Kant is not suggesting that he has shown in the transcendental deduction that the quantitative use of the categories (by the empirical subject) as in §10, is misapplied, and should be *replaced* by their qualitative unity in transcendental apperception (since it is the conceptualisation in itself). Both aspects are required, i.e. step one and two of the B-deduction and the Schematism. The Schematism gives the final stage of the conceptualisation process - in the empirical subject, in which intuitions are subsumed under the schematised categories synthetically *a priori*.

Therefore, as found above, the qualitative unity of the categories in transcendental apperception, as pure synthesis represented in its most general aspect, according to the pure concept of an object in general, underlies *a priori* their application to intuitions as quantitative unity by the empirical subject: Step one - as the analytic principle of apperception. Step two - as the synthetic principle of apperception - transcendental

apperception and the categories as necessarily underlying the empirical unity of consciousness involved in perception - I.e. all the variety of *empirical consciousness* must be combined in one single [transcendental] self-consciousness... (cf.A117 fn.). And a third step in the Schematism - the categories as quantitative unity, applied to intuitions in space and time through subsumption under their schemata, as transcendental determinations of time, which provides both our synthetic *a priori* and empirical knowledge of objects of experience.

Thus the Transcendental Deduction shows that the categorial synthesis in the pure forms of intuition (in the pure 'concept' of the transcendental object) as qualitative unity in transcendental apperception, prior to all thought in the empirical subject, is necessary for the *a priori* unity of space and time, and therefore for perception, and thus for determinate knowledge of intuitions through judgments, through the quantitative unity of the categories (grounded in their schemata as transcendental determinations of time). Through the schemata, e.g. permanence in time as the schema of substance, the category (as quantitative unity) is applied by the empirical subject to empirical intuitions in space and time, and represented universally in the necessary unity of time, i.e. through the subsumption of empirical intuitions under the schematised category. But the schema is itself grounded in transcendental synthesis through the categories, i.e. as qualitative unity in the transcendental unity of apperception. Thus the quantitative unity/application of categorial judgments, which are grounded in their transcendental schemata as necessary time determinations, presupposes their qualitative unity in the pure 'concept' of the transcendental object through the pure imagination, in originally *producing* the necessary unity of time in which the Schematism is based. In other words the schema is the pure category, in the pure forms of intuition in transcendental apperception (in the pure 'concept' of the transcendental object), insofar as it necessitates the unity of time in inner sense, proved in §26.

Therefore from the perspective of the empirical subject in inner sense in time, the unconscious sensible synthesis involved in the perception we experience as an affection of sensibility by objects, is prior to the application of the categories by the understanding, which is required for our *knowledge* of the objects given through perception; the categories as quantitative unity are a necessary accompaniment of the apprehensive synthesis as a conscious synthesis, as the logical forms of judgment in so far as they combine intuitions determinately for judgment. And therefore the logical forms of judgment are presupposed by the categories from this perspective. From the point of view of the empirical subject the pure concept of an object in general is therefore generated from the logical forms of judgment for the sake of the empirical unity of self-consciousness, and the possible accompaniment of the sensible manifold by the "I think," and our forms of intuition are therefore external to our forms of understanding, as mentioned above; outer and inner intuition are already given as sensible unities, requiring the *accompaniment* of the understanding and categories, by the empirical subject, for any *knowledge* to be possible.

From the point of view of transcendental apperception, however, the pure 'concept' of an object in general through the qualitative unity of the categories (as a synthesis by the pure understanding in its necessary relation to sensibility), is prior to the unity of the pure intuitions of space and time, and the forms of our intuition are therefore internal to transcendental apperception - as its medium of thought - and thought is paramount for Kant (contra the interpretations of Hegel, Rodl etc.). But this transcendental thought, constituted by pure intuition as spontaneity, which determines the sensible manifold in the pure 'concept' of the transcendental object, and in the process determines the unity of the pure intuitions of space and time, is constrained by what is originally given indeterminately (by the transcendental object) to intuition as

receptivity.

For any *knowledge* to be possible, however, this transcendental thought (or apperception) of objects, through the qualitative unity of the categories, must also be represented indirectly, i.e. as the "object of representations" of the quantitative application of the categories, by the empirical subject.

Thus through the schematised categories - as synthetic *a priori concepts represented* universally as transcendental time determinations, underlying *a priori* their empirical application, the categories apply *a priori to* objects of experience in general. For synthetic *a priori judgments about* objects of experience to be possible, the understanding and sensibility have to be separate faculties; which provides the problem the Schematism addresses - i.e. how the categories, as quantitative unity, can be applied to intuitions as synthetic *a priori judgments*, by the empirical subject, in addition to applying as the analytic and synthetic principles of transcendental apperception through their qualitative unity.²²

5. The Externality Versus Internality Of Intuition To The Understanding

Thus the externality of sensible intuition to our knowledge is required at the empirical level, in order for our pure and empirical judgments to refer **only indirectly to the objects apperceived directly in intuition in transcendental apperception**, which itself refers indirectly to the transcendental object of transcendental synthesis (the transcendental will, on my view). Thus even at the transcendental level the categories, as intellectual syntheses in the pure forms of intuition, refer indirectly to an object - not just outside sensibility (as receptivity in empirical consciousness), but outside the spontaneity of transcendental synthesis (in the pure forms of intuition) of pure theoretical reason. (The transcendental object or referent of transcendental synthesis is the pure spontaneity of pure practical will in the pure forms of intuition, on my view.) This explains the need for both the intellectual and figurative syntheses of the transcendental imagination - and therefore transcendental apperception as an "objective unity of apperception" - Kant's defining quality for judgments in general. -That is, a unity of self-consciousness also referring to a unity outside itself, or indirectly. ("All representations have, as representations, their object, and can themselves in turn become objects of other representations.") (A109)

The above arguments seem to answer John McDowell's concerns about the externality of our forms of intuition to the unity of apperception and the understanding, and thus his "subjective idealism" charge; Kant's view can in fact be shown to involve an openness of our empirical intuitions and concepts to reality. Step 1): The categories and sensibility from the perspective of transcendental apperception, through the categories as qualitative unity - in which sensibility is necessarily related to the understanding (as its medium of thought), and has as its transcendental object or referent (as intellectual synthesis) an object in general outside receptivity; in which our *a priori* sensible forms of intuition (space and time) are therefore internal to transcendental apperception. Step 2): - Transcendental apperception in its role in providing (through the effect of figurative synthesis on inner sense) the direct perception Kant often refers to (which is really a direct apperception) of objects in space and time. I.e. the transcendental synthesis of step one insofar as it affects *inner sense* synthetically *a priori*, determining the receptive unity of appearances in the pure intuitions of space and time, which makes perception possible. Step 3): the Schematism - our intuitions and categories from the perspective of the empirical subject in inner sense in time. I.e. the categories

²²We also have to be able to distinguish the possibility of objects from their actuality, through contingent judgments in empirical apperception; transcendental judgments in transcendental apperception give the actuality of all objects in conformity with them through their mere possibility.

applied as quantitative unity to given appearances in space and time, in which the understanding is a separate faculty from sensibility, and has as its (indirect) referent an object represented directly *in* intuition in transcendental appearance. Thereby providing both the direct and *indirect perception/appearance* of objects in space and time, required for *synthetic a priori* knowledge of the objects of experience.

Thus we have seen that through the schemata the application of the categories to appearances as quantitative unity is grounded universally in the necessary unity of time, but that the qualitative unity of the categories, as pure 'concepts' of an object in general in transcendental apperception, in the pure forms of intuition (prior to all thought in the empirical subject), *provides* the necessary unity of time. And the schemata, as transcendental determinations of time (and 'subjective space'), therefore form a link between the categories as epistemology and the categories as ontology, i.e. as appearance in the empirical subject (through the logical use of the understanding) as distinguished from the *a priori categories* in themselves in transcendental apperception (through the "real" use of the understanding).

The distinction I have drawn between the categories as quantitative unity (i.e. as epistemology), applied to intuitions by the empirical subject, and the categories as qualitative unity in transcendental apperception (i.e. as ontology) founds the possibility of synthetic *a priori* judgments. (See Kant's arguments in "The 'Selbstsetzungslehre" of the *Opus postumum*.)

6. Two Aspects Of Both The Subject And Space And Time Are Required

§10 describes the pure concepts of the understanding as pure synthesis represented in its most general aspect; through the same understanding, and the same operations by which through analysis it produced the logical form of a judgment, also bringing a transcendental content into its representations (of cause and substance etc.) which therefore apply *a priori* to objects, which general logic cannot accomplish. It can be seen from the above discussion that this explanation can apply to both ontological synthesis through the categories, as the first step in the conceptualisation process, as qualitative unity in the pure 'concept' of the transcendental object, through transcendental apperception (shown in the Transcendental Deduction and Schematism to underlie *a priori* their application to intuitions as quantitative unity); or to the latter, the final step in the conceptualisation process - the epistemological synthesis through the categories as quantitative unity, grounded in their schemata as transcendental determinations of time. I.e. the category/ schema as applied to intuition before or after the event of perceptions being given in the pure intuitions of space and time - the qualitative or quantitative unity of the categories respectively, in their application to intuition.

The transcendental subject responsible for originally unifying space and time cannot be *in* space and time, and the empirical subject in space and time cannot originally *unify* space and time. Therefore two aspects of the subject have to be recognised - as transcendental and as empirical, as well as two aspects of space and time - as spontaneous and as receptive.

Thus:

"Space and time... must be thought in two-fold relations to the subject: first, insofar as they are intuitions (and sensible ones indeed); second, in the way in which their manifold makes synthetic propositions *a priori* possible in general, and so founds a principle of synthetic *a priori* propositions." "Now the latter is only possible for the reason that these objects are regarded in dual rational relations. Space and time are intuitions with the dynamic function of positing a

manifold of intuition as appearance, which precedes all apprehensive representation (perception as empirical representation with consciousness) and is thought synthetically *a priori*, according to a principle as thoroughly determining - in which the subject posits itself in the collective unity of the manifold of intuition" (*Opus postumum* 22:44 p.179, Eckhart Forster et al).

"That space and time are not apprehensible objects - that they are not objects of perception - is independently clear; that, however, synthetic *a priori* concepts must lie at the foundation, and that, for this purpose, sensible representations must not be thought otherwise but *indirectly*. (I.e. not as objects in themselves, but only their intuition as appearance, which alone can be given *a priori*) is clear from the fact that without taking such a mode of representation for its foundation even experience would be impossible." "The object of the senses, represented as what it is in itself in comparison with the same object in appearance, founds the possibility of synthetic *a priori* judgments" (*Opus postumum* 22:41).

In other words, since the same sensible manifold must be represented both as receptively given to the subject by the object, and as the object affecting the subject, this means that the object of the senses, represented as what it is in itself (i.e. what it is in itself in so far as it is contributed by the subject) in comparison with the same object in appearance, founds the possibility of synthetic *a priori judgments*. "..the relation of intuitions to the concept, in which the I is taken doubly (that is, in a double meaning) insofar as I posit myself: that is, on the one hand, as thing in itself, and secondly, as object of intuition; to be precise, either objectively as appearance, or as constituting myself *a priori* into a thing (that is, as thing in itself)" (*Opus postumum* 22:414).

Therefore if the description of the application of the categories starts (as in §10) with the pure sensible intuitions of space and time, and thus with the empirical subject in inner sense in time, the pure intuitions of space and time are prior to the application of the understanding, and external to it. However if the description starts (as in §15) with the categories as qualitative unity, in the pure representation of the transcendental object, from the indeterminate "given" sensible manifold (prior to the unity of space and time), it starts with transcendental apperception, in which sensible intuition is the *medium* of transcendental thought, and internal to transcendental apperception and the pure understanding.

It follows (as referred to above) that from the point of view of the empirical subject the categories are applied to intuition (in providing the unity of the pure synthesis of apprehension, by bringing it to the pure concept of an object in general), for the sake of the empirical unity of consciousness in inner sense in time, and the accompaniment of sensibility by the "I think." But from the point of view of transcendental apperception (which is presupposed by empirical apperception), the categories combine sensible intuition in the pure 'concept' of an object in general (the transcendental object) for the sake of the transcendental unity of apperception, i.e. for the sake of the pure understanding in its "real use," rather than its "logical use" in relation to experience (cf. p.25 above, and Kant's *Inaugural Dissertation*).

In regard to the *Inaugural Dissertation* - since the "real use" of the understanding is found in the Transcendental Deduction to be based on the categories as logical functions of judgment in the pure forms of intuition, it can only (as pure theoretical reason) refer to the "thing in itself" outside sensibility or receptivity as "something in general," not to itself as the thing in itself as a noumenal substance. I.e. the pure category of substance, applied through the intellectual synthesis of the transcendental imagination, in the pure forms

of intuition, is our means of thinking of something in general outside sensibility or receptivity. Whereas in the *Inaugural Dissertation* the pure concepts were thought by Kant as able to refer to the "intelligible world" in itself as substance etc. (Which led to his worries about how this was possible, and how the pure concepts can apply to both the "intelligible world" and the "sensible world", and thus to the *Critique of Pure Reason* and the discovery of the categories as original logical functions of judgment).

7. Apperception Through The Categories As Both Ontology And Epistemology

Thus in perception appearances are receptively given in the pure intuitions of space and time - through the effect of figurative synthesis on inner sense, and for *knowledge* of these appearances (and therefore from the point of view of the affected empirical subject rather than the affecting transcendental subject) the syntheses of apprehension and recognition in a concept (of the A deduction) must combine the pure and empirical sensible manifold into a unified *knowledge* of objects in space and time. This requires the synthesis of apprehension in inner sense in time be brought to the pure concept of an object in general, through the categories of substance and cause etc., in combining intuitions determinately for judgment. Appearances are thereby apperceived (epistemologically) in the pure intuitions of space time, through the temporal synthesis of apprehension in inner sense in time being brought to the *concept* of something permanent in space which changes in time, through the quantitative unity of the categories.

But the figurative synthesis through the categories, by the transcendental subject, which makes perception itself possible (and which precedes all concepts in the empirical subject) is itself a temporal synthesis (as the reproductive synthesis based on the productive synthesis) through which the pure understanding/ transcendental apperception apperceives appearances objectively in space and time (as the *a priori* underlying ground of the perceptions given receptively in the pure sensible intuitions of space and time, for *accompaniment* by the quantitative unity of the categories - as epistemology). This brings out the significance of Kant's claim that we can take out of experience, synthetically *a priori*, only what we ourselves have previously put into it (cf. Bxviii 'we can know *a priori* of things only what we ourselves put into them').

Therefore the apperception of pure and empirical sensible intuitions, through the *a priori* categories, can be either a synthesis in inner sense in time in the empirical subject, as epistemology, or a transcendental synthesis in the objective unity of transcendental apperception, as ontology. As the former presupposes the latter it is therefore the appearance, or indirect knowledge, of transcendental apperception. And therefore also of the latter's transcendental object, the transcendental will, on my contention.

Sebastian Rodl's characterisation of pure knowledge through the categories, as referred to above, only encompasses the subjective epistemological apperception of intuitions through the categories, as a knowledge in the empirical subject, which I have contended is only the appearance or analogue of transcendental apperception - i.e. of ontology. Determinate knowledge of the given sensible manifold has to be a knowledge for the empirical subject in inner sense in time, situated in a body in space and time (not just for a subject in general or the "disembodied knower" Arthur Schopenhauer referred to). Therefore It is to the individual subject of will and knowledge in inner sense in time, situated in a body in space and time, that perceptions are receptively given in the pure intuitions in space and time, and for determinate knowledge the apprehensive synthesis in inner sense in time, accompanied by the categories for its synthetic unity, has to be from *its* point of view.

Thus as epistemology the pure and empirical synthesis of apprehension, accompanied by the categories

for its synthetic unity (in making empirical intuitions determinate for judgment) is a synthesis in the empirical subject in inner sense in time, itself "situated" in a body in space and time (in other words situated within the pure intuitions of space and time insofar as they are apperceived by the transcendental subject prior to all thought in the empirical subject). So apperception through the quantitative application of the categories is only the indirect knowledge of the objects apperceived directly in objective space and time through transcendental apperception. Therefore, as referred to above, we have an analogue of the latter in the epistemological application of the categories by the empirical subject.

Our cognition of objects in space and time therefore requires both the direct and indirect perception, or apperception, of objects in objective space, but in the reverse order from how this is usually understood; i.e. objects are first apperceived directly and objectively in outer intuition in objective space (in the transcendental subject) and then indirectly and subjectively in inner sense in time in the empirical subject, rather than vice-versa as in the customary view of direct and indirect perception.

How our knowledge through perception in inner sense in time, in the empirical subject, "situated" in a body in space and time, can include *a priori* synthetic knowledge of the objects in objective space which we only indirectly perceive (from our empirical perspective) is the problem the Schematism addresses. The solution is that our synthetic *a priori* judgments are grounded in the schematised categories in the necessary unity of time, in transcendental apperception, which underlies *a priori* all intuitions given to empirical consciousness, and can therefore provide *a priori* synthetic knowledge of the spatio/temporal objects known indirectly through empirical apperception, but directly through transcendental apperception.

Thus we have seen that the unity of the pure intuitions of space and time, and the empirical intuitions contained in them, is grounded *a priori* in transcendental apperception, which has its analogue in empirical apperception (as epistemology) - i.e. as a synthesis of the pure and empirical sensible manifold from the perspective of the empirical subject in inner sense in time. In the Aesthetic Kant states that through our pure intuition of space, which is "prior to all concepts," we are aware of other parts of space from where we ourselves are situated (cf. B38/A24). So we are already situated *in* space and time, prior to the application of the categories as quantitative unity by the empirical subject (§10 and the Schematism) - which can therefore only indirectly refer to the transcendental apperception of intuitions in objective space (through the qualitative unity of the categories). Kant, as referred to above, holds that this distinction between the categorial synthesis of intuitions by the transcendental subject (i.e. by the subject as thing in itself), and by the empirical subject (the subject as appearance), founds the possibility of synthetic *a priori* judgments (cf. "The Selbstsetzungslehre," *Opus postumum* pp.170-199).

Therefore perception is not just sensible representations in sensible space and time, in the empirical subject. - It is already *in* transcendental apperception, which contains an original synthesis through the categories as qualitative unity - in the pure 'concept' of the transcendental object; which as figurative synthesis affects inner sense, in the empirical subject, in conformity with the categories. So the latter's knowledge in inner sense in time, itself "contained" in a body in space and time, is only an analogue of the categorial synthesis through transcendental apperception.

Confining the apperception of appearances given in the pure intuitions of space and time to epistemology in the empirical subject can only result in a subjective idealism. The original subject of the categories is proved in the transcendental deduction to be a *transcendental* subject, itself providing the *a priori* unity of the pure intuitions of space and time and the empirical intuitions contained in them, prior to all thought in the

empirical subject, not the individual human subject already *in* space and time. The subject of the categories, Kant states, cannot know itself in time or through the categories; it is not an appearance in space and time, nor an individual mind in inner sense in time (cf. B37 "..we know our own subject only as appearance, not as it is in itself..."), but itself *contains* objective space and time, as well as the categories, and the empirical laws of nature which are their "special determinations."

8. Direct And Indirect Perception/Apperception Of Objects In Space And Time As Answer To The Sceptic

Thus Kant is not saying that intuitions as they are given in empirical consciousness through perception (which we think of reflectively as indirect knowledge of objects in an objective space and unreflectively as direct knowledge of these objects) is really all there is to our perceptual knowledge. I.e. that what we directly know subjectively in inner sense in time - appearances given in the pure intuitions of space and time, as sensible determinations of the empirical subject, are incorrectly referred by us to "knowable" objects in an objective space. We also have the ontology and objectivity of apperceived space and time in transcendental apperception. The transcendental deduction shows that our empirical knowledge of objects, through connected perceptions in inner sense in time, in the empirical subject, is an indirect knowledge, or appearance, of the outer intuitions we have direct apperception of in the transcendental subject.

Therefore we do have direct perception of objects in an objective space and time, as we unreflectively think we do, but this is not the direct perception of sensible intuitions as they are receptively given to empirical consciousness, which is held to answer the sceptic because the only objects we *can* know are these subjective appearances. We also have the direct perception/apperception of intuitions in objective space and time, in transcendental apperception, of which our knowledge in inner sense in time is only the analogue. Thus Kant answers the sceptic by showing that our indirect purported knowledge, of objects in an objective space, i.e. experience, which is accepted by the sceptic, *presupposes* our direct consciousness of these purported spatio-temporal objects in transcendental consciousness, as the *a priori* underlying ground of empirical experience in inner sense in time; which *constitutes* the relation of our sensible representations to objects outside us (the necessary intellectual *form* or laws of which are given through transcendental apperception).

Therefore Kant's argument is that we have indirect knowledge (in empirical apperception) through the categories as quantitative unity, of objects in an objective space and time, the necessary form or laws of which we have direct consciousness of in transcendental apperception, as ontology. In conformity with this, Kant suggests in the A-deduction that the necessitation of the unity of empirical consciousness by transcendental synthesis provides us with the consciousness of being affected by objects (cf. A104-106). Empirical knowledge thus presupposes pure knowledge and therefore transcendental synthesis; conversely, transcendental synthesis is only synthetic *a priori* knowledge as the necessary and sufficient underlying ground of empirical knowledge.

Thus our intuition of objects in space and time is itself an apperception, either transcendental or empirical, requiring the categories as qualitative or quantitative unity respectively. Our "knowledge through connected perceptions," i.e. experience, therefore requires the categorial synthesis of the pure and empirical sensible manifold both as ontology and epistemology. It follows that the categories, as conditions for the possibility of experience, through which intuitions are combined determinately for judgment through

the schematised categories, are at the same time conditions for the possibility of objects of experience (as objects only indirectly known by the empirical subject). - The schematised categories, as applied by the empirical subject in inner sense in time, to outer intuitions in objective space, are grounded as universals in transcendental apperception in time in general, in the pure 'concept' of the transcendental object, which constitutes the relation of sensible representations to objects outside us.

Therefore the fact that §10 starts with perceptions given in the pure sensible intuitions of space and time, as presented by the Transcendental Aesthetic, and thus with the empirical subject in inner sense in time, indicates that the subject of knowledge we are considering at that point is the empirical subject, itself already situated *within* the space and time of transcendental apperception (through the unity of the pure intuitions of space and time being grounded in transcendental apperception, prior to all thought in the empirical subject). So the synthesis of apprehension and recognition in a pure concept of the understanding, from the perspective of the metaphysical deduction (§10), takes place in inner sense in time in the empirical subject, which is already (from the perspective of the transcendental deduction) "inside" the space and time of transcendental apperception. - So the former synthesis is only an analogue of the original synthesis by transcendental apperception, and therefore provides indirect knowledge of the objects apperceived directly in objective space and time through transcendental apperception.

9. The Nature Of Kant's "Necessary Unity Of Self-Consciousness"

Thus the necessary unity of empirical self-consciousness is grounded in the necessary concept of an object, in pure self-consciousness. In other words there *is* a necessary unity of empirical self-consciousness in inner sense in time - grounded in a transcendental unity of self-consciousness in a pure understanding *a priori*, which unites the manifold given indeterminately in the pure forms of space and time in a transcendental 'concept' of the transcendental object, through the *qualitative unity* of the categories, as the *a priori* underlying ground of the unity of empirical consciousness. Consequently all our representations of perception in inner sense in time (in the empirical subject) *can* be accompanied by the "I think," which combines the manifold in the pure concept of an object in general through the quantitative unity of the categories (as pure concepts of synthesis), thereby determining the given sensible manifold of space and time appropriately for empirical judgment.

Therefore the unity of consciousness involved in experience (as knowledge through connected perceptions) contains both the transcendental unity of consciousness and the empirical unity of consciousness - both transcendental synthesis and empirical synthesis. Kant proves in §26 (which he utilises in the Schematism and Analogies) that experience is only possible through the representation of a *necessary* connection of perceptions, which cannot be represented through empirical synthesis alone, but requires the *a priori* as a transcendental element in experience itself.

Thus although the unity of consciousness involved in experience has customarily been taken to be just the empirical unity of consciousness in inner sense in time, Kant shows that this empirical unity of consciousness is necessitated by a transcendental synthesis of the manifold in a pure 'concept' of the transcendental object "through a pure self-consciousness a priori." The unity of consciousness involved in experience likewise however, cannot be provided by this transcendental unity of self-consciousness alone - which provides only an object in general and subject in general, i.e. a transcendental *thought*, not the determinate objects in space and time and determinate subject in inner sense in time which we require for

experience. In the Transcendental Deduction, however, Kant's arguments show (cf. especially §§18,19,20) that the necessary unity of consciousness involved in experience, containing both transcendental and empirical self-consciousness, is the *objective unity of self-consciousness*, which combines all the manifold of sensible intuition in one active self-consciousness through judgments - transcendental and empirical, and concepts - synthetic and analytical.

10. The Necessary Unity Of Self-Consciousness As The Necessary Unity Of Judgment

It can be seen that this objective unity of apperception, which contains both transcendental judgments through transcendental logic, and empirical judgments through general logic, is the "unity of consciousness" Kant refers to as "alone constituting the relation of sensible representations to objects and the fact that they are modes of knowledge.." (B137/138). Neither the synthetic unity of transcendental self-consciousness (in the pure 'concept' of the transcendental object) nor the synthetic unity of empirical self-consciousness (through accompaniment by the "I think") is alone sufficient for the relation of representations to an object and the fact that they are modes of knowledge, although both are necessary for it. In co-operation, however, they are both necessary and sufficient, and together they constitute the objective unity of apperception involved in experience "..the elements of which are therefore extended in terms of the necessary and universal conditions of experience itself" (Robert Harman, in "Immanuel Kant, Logic"), containing both the qualitative and quantitive unity of the categories (in the concept of the object), as well as the logical forms of judgment in the empirical understanding. It follows that - "The first pure knowledge of understanding, then, upon which all the rest of its employment is based", and which also at the same time is completely independent of all [particular] conditions of sensible intuition, "is the principle of the original synthetic unity of apperception" (B138), through which the pure forms of sensible space and time, underlying perceptual consciousness in general, are combined into a pure representation of the transcendental object, as "something in general" outside sensibility (as receptivity).

Kant has to show, however, that this objective unity of apperception constituted by transcendental and empirical judgments (if it is to be identified as the unity of consciousness involved in experience) is also necessary for the sensible unity of the manifold involved in perception, rather than just for the unity of the understanding in the representation of objects. He aims to do this (in §26 of the B Deduction) by proving that the transcendental unity of apperception (in the pure 'concept' of the transcendental object) is necessary as well as sufficient for the unity of the pure intuitions of space and time, and therefore for perception, prior to all concepts in the empirical subject. Without this proof we could have a unity of perception and empirical consciousness without requiring the qualitative unity of the categories.

Thus the representation of the necessary connection of perceptions required for experience, i.e. the necessary unity of the pure intuitions of space and time, and the empirical intuitions contained in them, is provided by the underlying unity of transcendental apperception and the categories. It follows that the empirical unity of self-consciousness is "merely derived from" the objective transcendental unity under given conditions inconcreto (B140) and the necessary unity of self-consciousness is in itself therefore a necessary unity of the understanding, i.e. the necessary objective unity of apperception - containing through the categories the *a priori* unity of both our pure and empirical sensible intuitions and our pure and empirical judgments, ultimately grounded in the transcendental productive synthesis through the categories - in the pure representation of the transcendental object.

We have seen that Kant holds that "the logical form of all judgments consists in the objective unity of the apperception of the concepts they contain," i.e. consists in the role of the judgment in the metaphysical objective unity of apperception. Which is to say that it consists in a unity of self-consciousness which also refers to a unity outside itself, or indirectly, constituting objective knowledge when the unity outside itself is also given determinately *in* intuition - not just in the associative unity of appearances in inner sense in time (from which only subjective knowledge is possible), but also in the objective unity of appearances in outer intuition in space, in transcendental apperception. - The judgments in empirical apperception are subsumed under the transcendental qualitative unity of the categories synthetically *a priori* (ultimately grounded in pure intuition in general in the pure 'concept' of the transcendental object).²³ Through concepts, Kant states, an immediate representation is subsumed under a higher representation. In *a priori* synthetic concepts however, the universal, or higher representation, is given before the immediate representation in empirical consciousness in inner sense in time (which it underlies synthetically *a priori*), rather than vice versa, as in empirical concepts. Hence the necessity of the former in relation to experience.

It follows that a pure concept of the understanding, insofar as it is thought by the empirical subject in inner sense in time independently of its schema, must emerge from a top down productive synthesis of the transcendental imagination, to empirical synthesis in inner sense in time. The transcendental deduction shows that the categories are originally thought in the pure forms of intuition, in the pure 'concept' of the transcendental object, in transcendental apperception, not as independent of intuition, or as schemata as transcendental determinations of time - which are rules of judgment for the *empirical* subject. (The Schematism chapter shows how the schematised categories are applied in experience.)

The categories are thus originally thought by the pure understanding as productive syntheses of the transcendental imagination, in the pure forms of intuition - in the pure 'concept' of the transcendental object, through which intuitions are represented as objects prior to all thought in the empirical subject. This is followed by the transcendental synthesis through the categories insofar as it necessitates the unity of empirical consciousness. This necessitation being not just sufficient but necessary for the unity of the pure intuitions of space and time, and therefore for perception, Kant holds. The schemata, as transcendental determinations of time, are thereby produced through the pure 'concept' of the transcendental object in so far as it necessitates the unity of time in inner sense. The pure synthesis of appearances in (subjective) space and time (by the empirical subject) according to the quantitative unity of the categories, can now be represented universally through the schemata of the categories as transcendental determinations of time, and therefore the categories apply necessarily to all appearances in sensible space and time, and can be thought by the empirical subject independently of their schemata, but only as subjective thought, not as knowledge.

Thus schemata are necessary for knowledge through the categories, in which objects represented directly in the transcendental unity of apperception are known indirectly in empirical apperception; and therefore a schema judgment, applied to appearances in subjective space and time by the empirical subject (and grounded universally as a transcendental determination of time), refers indirectly but necessarily to appearances combined in objective space and time through transcendental apperception, and therefore provides for both empirical and synthetic *a priori* knowledge of objects of experience.

^{23 (&}quot;All representations have, as representations, their object, and can themselves in turn become objects of other representations.")
(A109)

Thus we cannot start with the category as a pure concept derived from the logical forms of judgment in the empirical subject, in inner sense in time, which is applied to given outer intuitions in space through a schematised category. We have to start with the pure category in the pure forms of intuition in the transcendental subject, prior to the unity of the pure intuitions of space and time, and therefore prior to all thought in the empirical subject, and the logical forms of judgment of general logic - as their *a priori* ontological ground.

11. Transcendental Will As A Necessary Aspect Of The Objective Unity Of Apperception

Our consciousness of objects affecting us, Kant holds on my reading, is our consciousness of the necessitation of the empirical unity of consciousness involved in perception by transcendental self-consciousness, itself constituted by the *a priori* combination of the pure forms of intuition in the pure 'concept' of the transcendental object, which as figurative synthesis affects *inner sense*, thereby determining space and time as pure sensible intuitions. This is necessarily correlated, on my view rather than Kant's, with the subject's prior consciousness of itself as a pure *willing*, as a spontaneity in/of the pure sensible forms of intuition, which can only affect receptive sensibility indeterminately, and is the transcendental object or referent of transcendental productive synthesis (as pure reason rather than pure understanding). The transcendental productive and reproductive syntheses of pure theoretical reason, in the pure 'concept' of the transcendental object, provide the necessary unity of space-time, and thus allow a subsequent transcendental apperception, by the pure subject of will, of itself as an individual will grounded in a general will, thinking *in* space-time - i.e. as spontaneity in/of the pure forms of sensibility as pure technical/practical reason, prior to any thoughts or volitions as represented in inner sense in time.

The spontaneity of transcendental will (simply as a *willing* in general), in affecting receptive (pure) sensibility indeterminately, rather than the spontaneity of pure theoretical reason, in the pure 'concept' of the transcendental object, is, I am suggesting, the *original* self-activity of the subject expressing itself in general through its pure forms of sensibility (as spontaneity). This (indeterminate) pure 'willing' is the subject of will's consciousness of itself as *free* self-activity, which also however (as second and third "moments" respectively, of the same self-activity), has to be represented as a *given* object in general, *by pure* theoretical reason, and as a pure individual will in general in *pure practical reason*, so that it can subsequently be conscious of itself as an individual will freely acting *in* space and time, as purposive will²⁴ In other words the subject transcendentally "posits itself as object [and subject on my view]" in the pure forms of intuition (cf."The Selbstsetzungslehre," *Opus postumum* 22:11), for the necessary unity of space and time in which it can subsequently operate as purposive will.

The transcendental self-consciousness of oneself as a self-active moving subject in space-time,

²⁴ I hold that will, as the transcendental object or referent of transcendental reproductive synthesis, is the will of matter in general (i.e. its inner nature as desire/aversion) which is *determined* by transcendental synthesis (or matter as objectively realised). But in the will as the inner nature of organic substance, or organised matter, the reverse is the case, matter is **further** determined by purposive will, i.e. is a further unification (from within) of matter determined in space/ time through transcendental synthesis, - whereas the original indeterminate will, as the transcendental object of transcendental productive synthesis, when further determined (from without) through transcendental reproductive synthesis, has to be a will of **matter** in general (as will without knowledge). These considerations, I hold, allow for the free activity of the human will along with the determinacy of the causal laws of matter. [I.e. freedom to act according to our own motives. Kantian Freedom (freedom from the determination of our will by nature and our own background) is touched on (which is all that can be done here) in the following section (12. pp.68,69). For a more detailed discussion of Kantian Freedom see my earlier essay: "Reflections on Kant's epistemology in the light of Schopenhauer's interpretation". 2001. (pp.122-124 of this document.)]

⁽Note 1: In Kant's Opus postumum the 'ether' is put forward as one being as the necessary ground of the empirical laws of matter.

Note 2: In Kant's Pre-Critical phase he held that the inner state of matter can 'only' be conceived as desire/aversion.)

subsequent to the transcendental productive and reproductive syntheses in the 'concept' of the object, is, it can be seen, a necessary aspect (along with transcendental synthesis) of our pure intuition of space, which contains, prior to all thought, the consciousness of other parts of space "from where we ourselves are situated" (cf. B38/A24).

Thus as well as presupposing the transcendental productive and reproductive syntheses of pure theoretical reason (as proved in §26 of the B-deduction), our pure intuition of space also presupposes our transcendental will (i.e. our human will in itself), which as pure practical reason grounded a priori in a transcendental will in general, can think in space-time, prior to any thoughts or volitions as represented in inner sense in time. It was not until his final work, the Opus postumum, that Kant realised that the "moving subject" had to play a role in his Critical philosophy. - The transcendental object or referent of transcendental synthesis must now be recognised as an immanent metaphysical will, on my interpretation (and extension). Since we "insert" empirical laws into nature the transcendental object must be a different aspect of the transcendental subject, rather than a different object - i.e. a moving subject in general, which is needed for the transition to physics. Kant found that he had to consider not just the moving object in its transcendental conditions, but also the moving subject in its transcendental conditions. - "The moving forces are what the moving subject itself does, with its body, to other bodies." Space and time are now explicated not just as sensible intuitions, but as "forms of our effective forces" (Opus postumum 21:38). An ontological transcendental idealism is thus developed in the Opus postumum, which contains the "ether" or "caloric" as the (universal) inner nature of matter, with general empirical laws of desire /aversion; the same matter as objectively realised through transcendental synthesis, but from within - i.e. as the same form of spontaneity or moving force in/of the pure sensible forms of space and time as transcendental synthesis, but as in itself will without knowledge (which is unified by the former as to its desires/aversions, which thereby determines the unity of space-time).

Kant's concept of *moving force* in the *Opus postumum*, which is in itself the moving force of reason (including pure practical reason), allows the transition to physics, as the moving force of matter can indifferently refer to both transcendental synthesis and transcendental will. Thus for Kant there is one being at the heart of matter - the ether as will without knowledge - and matter in itself is therefore both transcendental will and transcendental objective synthesis, given in appearance in space and time as one co-ordinated moving matter, postulated in perceptually empty space as a force plenum (ether) imperceptibly filling all space and time.

In the first Critique Kant does not specify that the transcendental object is an aspect of the transcendental subject - it could be "outside us" transcendentally (cf. B345). But in the *Opus postumum*, I have contended above, the transcendental object (of transcendental synthesis) *is* recognised as an aspect of the transcendental subject, i.e. as immanent transcendental will, which Kant realised was necessary for the transition to physics and the empirical laws of nature to be possible.

Thus the transcendental will at its most basic, I am contending, is a pure spontaneity in general in [of] the pure forms of intuition (broadening Kant's notion of 'spontaneity' as only referring to the understanding), which can only affect pure receptive sensibility indeterminately (as the transcendental object of transcendental productive synthesis). - Then as the indirect transcendental object of transcendental reproductive synthesis, as an all-pervasive general will without knowledge, i.e. ether, as the inner nature of matter - which is determined into a unity (from without) by transcendental reproductive synthesis, and

thereby provides the necessary unity of space-time which is required for purposive will and perception, - i.e. will *with* knowledge, as purposive self-activity *in* space and time, grounded as organic substance or organised matter, as idea. Thus the ether is put forward by 'my Kant' in the *Opus postumum* as a transcendentally postulated substance, which is a necessary material condition of experience.

It follows that the transcendental subject containing the pure forms of intuition and the categories is a *transcendental* thing in itself, since the transcendental object of transcendental theoretical synthesis, transcendental will, is also an aspect of it. And the world in itself is therefore an *a priori synthetic concept* of possible experience in space and time, in which the indeterminate spontaneity of the pure will is a necessary material condition of experience - since it is the ground of the inner nature of matter, i.e. ether as will without knowledge, as the transcendental object of transcendental reproductive synthesis (which provides, through its laws of desire/aversion, determined into a unity from outside by transcendental synthesis, the necessary unity of space and time required for individual purposive will and perception, [grounded transcendentally in an individual will in general in space-time]).

Without the (transcendental) individual will in general in space-time, which on my contention is necessary for our pure intuition of space, the latter would not provide us with "...other parts of space from where we are ourselves situated.." which Kant holds our "non-conceptual" pure intuition of space (Transcendental Aesthetic) is able to do. In the Transcendental Deduction Kant argues that the transcendental syntheses of the pure understanding are both sufficient and necessary for our pure intuition of space (and subsequently for our experience in inner sense in time), but in the *Opus postumum* he realised (on my understanding) that his critical philosophy required the individual "moving subject" in general, for the concept of space (as well as the unknowing general will of matter as the transcendental object of transcendental reproductive synthesis). Otherwise the transcendental deduction would provide us with the concept of one substance as the ongoing object of experience under causal laws, rather than the concept of different substances in space and time which was required.

This raises the question of whether our "pure intuition of space", with its "other parts of space from us" can still be held to be non-conceptual. The correct answer, I believe, is that we have both the pure receptive, non-conceptual sensible intuition of space, as 'subjective space' in inner sense in time, as well as the transcendentally conceptual 'objective space' provided by the pure subject of individual will in general of pure practical reason, which provides a further unification (as idea) of the 'space-time' provided by transcendental synthesis (and its transcendental object). And therefore we have the concept of being affected by different objects in space and time rather than just by one ongoing object of experience (which is none the less correct for the knowledge of matter and its laws, in space-time).

In the first Critique it was "a mere hypothesis" that the transcendental object of intuition could be will (cf.A340); and the transcendental subject, although explicitly put forward as a *universal* subject in the B-Deduction: "As *my* representations..they must conform to the condition under which alone they *can* stand together in one universal self-consciousness, because otherwise they would not all without exception belong to me."(B133), this does not appear to have been taken on board by the majority of Kant scholars.

It was held by Kant in the First Critique that we have consciousness of ourselves as the subject of transcendental synthesis "..not as I appear to myself, nor as I am in myself, but only that I am." (cf.B157); but this consciousness is a thought, not knowledge (which requires intuition), but as we can (problematically) conceive the possibility of an "intellectual intuition" of our thinking self, we can at least think

of our transcendental self as separable from the empirical subject in inner sense in time (which is an appearance).

Prior to the Critical philosophy the appearances of outer and inner sense, i.e. the physical and the mental, were taken as things in themselves, and therefore no question was asked about what their transcendental grounds might be. But to restore our unity of consciousness in accordance with the above, and the findings of the first Critique, pure reason (I would suggest) can now undertake a conscious unification of the transcendental elements of experience, through an objectively valid metaphysics of the transcendental subject. The fallacious "rational doctrine of the soul," which Kant criticised in the first critique, identified the human soul in itself with the individual thinking subject of inner sense, which is just an appearance. But as the transcendental subject is not an appearance, even though it is also not knowable as the *transcendent* thing in itself, a half-way position is now possible - the pure metaphysical subject of will and knowledge as a transcendental thing in itself - as the *a priori* underlying ground of all experience.

12. Our Pre-Reflective Consciousness Of Ourselves As Embodied Subject - As Transcendentally Conceptual, Rather Than Non-Conceptual

It has been noted by various Kant commentators (usually in defense of their non-conceptualism) that our "non-conceptual" pure intuition of space (Transcendental Aesthetic), by which objects are intuited in other parts of space from us, i.e. in other parts of space from where our own body is outwardly (as well as inwardly) spatially intuited, entails the consciousness of oneself as embodied subject, and therefore the knowledge of oneself as a self-moving object, non-conceptually. They fail to take account of the fact, however, that on Kant's view both the embodied subject and the pure intuition of space presuppose the transcendental productive and reproductive syntheses (in the pure forms of intuition) in the pure 'concept' of the transcendental object. - This transcendental object being the transcendental will, on my contention, which, as the referent of productive synthesis, is an indeterminate pure willing in general in/of the pure forms of intuition, underlying the individual will (in general) conscious of itself as a self-active moving subject in space-time, subsequent to the transcendental productive and reproductive syntheses in the 'concept' of the object, and prior to all thoughts or volitions as represented in inner sense in time.

Matthew S. Rukgaber²⁵ suggests (in the light of Kant's developments in the *Opus postumum*) that our pure intuition of space, through which we experience space as an infinite given sensible manifold non-conceptually (Transcendental Aesthetic), is grounded in our consciousness of the unbounded possible extension of our own movement along the axes of our body, which therefore entails our pre-conceptual capacity for intentional bodily movement. But I would point out that although we need this inner feeling of the body's dimensions and our pre-reflective bodily movement for our consciousness of the directions and unboundedness of space, this is subsequent to the transcendental productive and reproductive syntheses through the pure representation of the transcendental object. The embodied subject's pre-reflective orientation and movement in space is therefore itself (primitively) conceptual, and is transcendental rather than a Kantian "appearance" as Rukgaber holds, as it is prior to our pure sensible intuition of space as receptively given to empirical consciousness (Aesthetic), as well as prior to our "volitions" as represented in inner sense in time, i.e. as appearance.

The purposive will in particular (and in general) thus presupposes the pure productive and reproductive

²⁵ Kant Studien 2009, pp166-186. "The key to transcendental philosophy": space, time and the body in Kant."

syntheses in the pure 'concept' of the transcendental object (in itself, as the transcendental referent of reproductive synthesis, the general unknowing will of matter), for its own self-activity in space and time according to purposes. Otherwise, as Rukgaber himself suggests (i.e. if space and time are not first unified according to objective laws), it is indeterminate whether *we move* or space moves. The productive (underlying the reproductive) transcendental syntheses along the axes of the body (prior to the determination of the subject as embodied subject) provides our fundamental concept of an absolute space, I would suggest, and grounds our pure intuition and empirical representation of it, which as empirical space with empirical dimensions is nonetheless relative to the individual's own spatial and temporal orientation. Therefore the same universal act as the pure representation of the transcendental object through productive and reproductive synthesis, in the pure forms of intuition, is subsequently used (insofar as it necessitates the unity of space-time) by the pure subject of purposive will - as a transcendental subject moving its position *in* space-time according to *a priori* purposes (i.e. through the same act as the productive transcendental synthesis in the pure forms of intuition, but as a transcendental will *thinking* in the necessary unity of space-time).

The purposive will presupposes not just the transcendental syntheses through the categories, and the empirical laws of nature derived from them, but also its own grounding in these mechanistic laws of matter - but can now move its own body in space and time according to purposes - and thereby transcendentally constitute organic substance (or organised matter), as an "idea" in the pure forms of intuition as spontaneity.

Thus (for pure imaginative reason) the spontaneity of transcendental synthesis, in determining the sensible manifold in the 'concept' of the object, through pure theoretical reason, and thereby providing for the necessary unity of space-time and the empirical laws of matter, is followed by the spontaneity of pure practical/technical reason, i.e. transcendental purposive will, in determining the sensible manifold (and the matter underlying it) *in* space-time, i.e. as organised matter. The final product of this transcendental conceptualisation for the human being however, is the subject and object as appearance, i.e. the thinking being in inner sense in time which can immaterially move its material body in space and time according to purposes.

The further determination of human will as pure practical/moral reason - I.e. in the transcendental (underlying the empirical) concept of the moral 'ought' (Kant's 'Categorical Imperative'), thought universally in the individual purposive will in general of [at least] human nature, as a necessary underlying aspect of all beings which can be regarded as 'persons', is an idea which unifies rational beings in space and time rather than an idea which unifies space and time, so it does not belong in the transcendental conceptualisation involved in the pure imaginative (analytic) reason I have put forward. This can no doubt be related to Kant's worries about how pure moral reason, as "a different reason" from pure theoretical (and the correlated pure practical/technical) reason, can nevertheless be the same reason. My answer would be that although pure moral imaginative reason is indeed different from (although presupposing) the analytic principle of pure imaginative reason through the categories which I have put forward, they both have their source in the original synthetic principle of reason I have put forward.

'Kantian Freedom' (i.e. Kant's solution to the problem of the possibility of the freedom of our own will from determination by nature and our own background) was by way of his distinction between the empirical and intelligible character of the human will (the empirical character being held to be the appearance of its intelligible character). On my view a person's intelligible character would be their action insofar as it is

determined (or not) in accordance (*a priori*) with the 'categorical imperative' of pure practical moral (imaginative) reason, by being thought (transcendentally) in the schematism of the pure practical/technical reason I have put forward.

Therefore although I would agree with John McDowell that our thinking *can* figure in our bodily movements, without needing mediation by some sort of mechanism - this, on my view, is only at the transcendental level (of the embodied subject), in transcendentally moving its position in 'objective space'. At the level of experience the human subject does have to be represented as a "ghost in the machine" which can direct its bodily mechanism according to its own purposes in space and time. Thus my reading of Kant entails that mind/body dualism *is* required for our concept of ourselves and nature, but only at the level of appearance, and is only a "category mistake" (along with all the attendant philosophical problems) if this appearance is taken as the thing in itself, rather than just as pre-supposing it as its *a priori* underlying ground, as the *a priori synthetic concept* of possible experience in space and time. In other words mind-body dualism is a top-down metaphysical construction by the transcendental subject of will and knowledge, on my contention.

It follows that the transcendental subject provides not just the multi-level necessary concept of *things* in space and time (through pure productive, reproductive and schematic syntheses) but also the interrelated multi-level necessary concept of oneself as an individual will in inner sense in time, which can immaterially move its material body according to *a priori* purposes, as the appearance of pure practical (technical and moral [for moral purposes]) reason - whose *medium of transcendental thought (along with the pure form of succession)* is our inner spatial sense of our body, i.e. the universal pure form of three-dimensionality as the inner intuition of the body rather than as the outer intuition of the world around us. (Itself grounded in an indeterminate pure will in general, also in the pure forms of intuition as spontaneity, as the transcendental referent of theoretical productive synthesis.)

Thus, transcendentally, the pure theoretical and pure practical together provide both the underlying unity of our pure and empirical sensible intuitions (as they appear to the empirical subject) and the underlying unity of will and knowledge as *they* appear to the empirical subject, itself "situated" in inner sense in time in a body in space and time.

Therefore the empirical consciousness involved in perception, in inner sense in time (accompaniable by the "I think" of empirical apperception), is an indirect knowledge of objects apperceived in objective space and time through transcendental apperception. And this transcendental apperception of objects in objective space and time (grounded in productive synthesis in the pure 'concept' of the transcendental object), is necessarily correlated, I am suggesting, with a prior consciousness (by the transcendental subject) of itself as indeterminate transcendental will. I.e. as pure self-activity in/of the pure sensible forms of intuition (as spontaneity), which has to be represented by the transcendental understanding as a "given" object (in general) for determinacy in space and time, and the human subject, grounded universally in a human will in general, can subsequently be conscious of itself as the self-activity of one body among all the others only perceived in space and time (which can only be thought *indirectly* as housing individual wills).

Thus we have seen that the unity of consciousness involved in experience is not the empirical unity of apperception alone, i.e. my representations in inner sense in time accompaniable by the I think, or the transcendental unity of apperception alone, i.e. my representations in the pure 'concept' of the transcendental object, through the transcendental productive and reproductive imagination; but my

representations in the metaphysical *objective unity of apperception*, which contains both transcendental *and* empirical self-consciousness, combined through judgments, transcendental and empirical, as "functions of unity among our representations" (cf.A69/B94). Also containing (I am contending) as a different aspect of the transcendental subject rather than as a different object, the transcendental referent of transcendental productive synthesis, i.e. transcendental will.

We have also seen that Kant holds that the logical form of all judgments consists in the objective unity of the apperception of the concepts they contain, i.e. consists in the combination of representations under a higher representation, or higher unity of consciousness, referring to a judgmental object, through synthetic concepts in transcendental apperception and analytical concepts in empirical apperception. The way representations are brought under one apperception, states Kant, is through the logical function of judgment, and the categories are these functions of judgment insofar as they bring sensible intuitions into the objective unity of *transcendental apperception*, which is a unity of intuitions *constituted* by the logical function of judgment in the categories, rather than a unity of intuitions accompanied by judgments, as in empirical apperception. Thus, as found earlier, although the objective unity of transcendental apperception can be expressed by judgments in empirical apperception (namely when the latter have an objective reference), empirical apperception is not itself an objective unity of apperception, as it is comprised by the *accompaniment* of sensible representations by the logical forms of judgment, rather than their constitution by them (as "weighty" objects), as in transcendental apperception.

13. The "Mind-Independence" Of Objects Of Experience

How can we have a priori synthetic knowledge of objects which are independent of us, if we can only know them indirectly in inner sense in time as appearances? Kant's answer is that we are conscious of them as thing in itself and as appearance. We have to distinguish a thing in itself from appearance at the level of experience itself. - Experience is not just empirical self-consciousness, but both empirical and transcendental self-consciousness. Experience, Kant proves in §26, is only possible through the representation of a necessary connection of perceptions - transcendental consciousness necessitating empirical consciousness - which requires reference to the a priori; the atemporal; the subject in itself; and pure intuition. The "unconditioned" is shown to be an element in experience itself, i.e. the pure category in pure intuition in general in the original subject, through a pure synthesis in/of the pure forms of intuition, in the pure 'concept' of the transcendental object (in itself, I am suggesting, an indeterminate transcendental willing in general, in the pure forms of intuition as spontaneity). The Antinomies result from trying to find the unconditioned causality of causal events through empirical synthesis, and therefore as prior causes in time, leading to an uncaused cause as their original ground. But Kant shows that the unconditioned of experience (as the highest principle of theoretical reason) is in fact the a priori category, in the pure forms of intuition as spontaneity, - ontology as immanent thought, through which synthetic unity in the concept of the object is taken as far as the unconditioned but no further.

The object affecting our sensibility, whether the empirical or transcendental object of intuition, has to indeed be independent of appearances as sensible determinations of the individual human mind, in inner sense in time. But as the independent object which we *know*, in objective space and time, it is not *transcendentally* independent of us, as objective space and time are not transcendentally independent of us. Thus the thing in itself which we know indirectly in inner sense in time but directly in the objective unity

of transcendental apperception, is the *a priori synthetic concept* of an object affecting us, as the productive/reproductive/schematic/apprehensive syntheses of the transcendental imagination, whose transcendental referent, or transcendental object, is the transcendental will, on my contention.

If we have knowledge, the "determinate relation of given representations to an object," of the external world, as we think we do, this knowledge must be of a world or independent reality which is correlated with our thought, as our representations cannot have a determinate relation to an object as a thing in itself independent of our thought. For Kant this thing in itself which does feature in our knowledge, which *is* correlated with our thought, is transcendental apperception. But this transcendental thing in itself must also be represented indirectly, i.e. in inner sense in time, for any *knowledge* of an independent object to be possible. Thus this knowledge is only knowledge of an independent object for the *empirical* subject of will and knowledge, itself the subject of inner sense in time, "situated" in a body in space and time (as appearance).

Other wills as individuals (rather than as individual will in general) can of course *only* be thought indirectly, and therefore not as a necessary knowledge of a determinate individual will independent of us. Thus insofar as it can be considered as the inner cause of temporal changes in another body in space, the will cannot be thought as a "metaphysical principle" (cf. Kant's *Critique of the Power of Judgment*) through the category of cause, but only as a "transcendental principle" (and therefore as not "further determined" through the category as an empirical object, as it is not "necessary knowledge" of the laws of action of other wills).

Therefore the determinate knowledge of an object independent of us is the sensible object apprehended in space and time through perception (accompanied by the "I think" of empirical apperception), along with all its transcendental conditions of possibility - i.e. transcendental productive and reproductive synthesis and transcendental general and individual will.

Thus a physical object in space and time can be cognised as an object independent of us through the categories, as both qualitative and quantitative unity, and can also be thought indirectly as housing an individual will. Without the object and subject as appearance, i.e. as object of outer and inner sense respectively, we would have only necessary thought in the pure forms of intuition, with no determinate objects in space and time to apply it to. Therefore, as stated above, we are only making a "category mistake" in regard to the empirical dualism of our mental and physical concepts, in Gilbert Ryle's terms ("The Concept of Mind",1949) if these subjective appearances (rather than their transcendental grounds) are taken as the thing in itself, which they in fact only imply.

I have argued above that the transcendental object (or referent) of transcendental (productive) synthesis is transcendental will (as indeterminate spontaneity in/of the pure forms of intuition) which therefore also belongs in the objective unity of apperception containing the unity of experience; as a different *aspect* of the physical object perceived in space and time and apperceived as thing in itself through transcendental apperception, not as a different object.

14. The Thing In Itself As A Transcendental Element Of Experience

Thus the independent objects which we know, in other parts of space from us, are independent of us as the empirical subject of will and knowledge in inner sense in time, but not independent of us as the transcendental subject of will and knowledge we are conscious of (in the pure forms of intuition as

spontaneity). Therefore experience contains both the thing in itself and its appearance. But this is not a (knowable) *transcendent* thing in itself, independent of all thought, e.g. in the space and time which transcendental realism espouses, and which implies that we *can know* a thing in itself independent of all thought. Transcendental Idealism does require (for the pure understanding) that something affects our sensibility, providing the "given" sensible manifold in the pure forms of space and time, and this something affecting us as thing in itself is referred to by Kant as the transcendental object. But Transcendental Idealism does not and cannot require that this affecting object is mind-independent. We cannot know that it is not *ultimately* mind independent (or not ultimately transcendent mind); however as far as we do know it, on my contention, it is transcendental mind, of which the individual human mind in inner sense in time is the appearance.

Therefore although we correctly think of the objects affecting our senses as inhabiting a causal world in an objective space and time, Kant's arguments show that this objective world is in fact provided by the objective unity of transcendental apperception, which is *constituted* by the pure *thought*, in the pure forms of intuition as spontaneity, of an object in general and subject in general, requiring both transcendental knowledge and transcendental will (on my view), prior to and necessarily underlying all thought in the empirical subject in inner sense in time. Thus the thing in itself which we *know* is not mind or thought independent, but is independent of the individual human mind as an appearance in inner sense in time.

This dual-aspect thing in itself which we do have consciousness of, however, the transcendental subject of will and knowledge, as it presupposes an ultimate underlying unity which we cannot be conscious of (at least in our present state), may *problematically* have a thought-independent perspective, i.e. a consciousness of its own unity as a non-dualistic and non-relative thing in itself, providing a basis for faith in the 'transcendent', beyond sensibility as either receptivity or spontaneity (reflected in the unity of art).

It follows from the above that our perceptual consciousness of appearances in sensible space and time, accompaniable by the "I think" of empirical apperception, is *not* all that we can know - anything external to it having merely problematic existence as 'transcendent noumena'. We have *knowledge* of something external affecting our sensibility, but we do not know whether it is ultimately mind-dependent or ultimately mind-independent, but insofar as we do know external objects affecting our senses they are not mind or thought independent, but their objectivity consists in their place in the multi-level objective unity of apperception - which through the categories subsumes intuitions under a higher unity of consciousness, underlying empirical consciousness synthetically *a priori*, referring (penultimately as far as we can know), through a transcendental intellectual synthesis through the categories, as productive synthesis, to the transcendental will. The latter therefore has a shared pivotal role with the pure understanding, in this metaphysical objective unity of apperception, according to my interpretation and extension.

Thus our knowledge of an object in space and time presupposes our apperception of it not just as appearance but as thing in itself - the consciousness of ourselves as original apperception, consisting in the pure thought, in the pure forms of intuition as spontaneity, of a subject and object in general, which as figurative synthesis affects us as *empirical subject*, providing us with the consciousness of being affected by objects. The distinction between this object as appearance and as thing in itself provides the possibility of synthetic *a priori* judgments, according to Kant (cf. *Opus postumum*).

15. A Metaphysical Objective Unity Of Apperception As 'My Kant's "Necessary Unity Of Self-Consciousness"

According to the customary reading, the purpose of the Transcendental Deduction is to prove a necessary unity of *empirical* self-consciousness, for which the concept of an object in general through the categories (as the logical forms of judgment in their role in unifying intuitions determinately for judgment) is generated *after* the pure imaginative synthesis of *a priori space and time*. But this necessary unity of empirical self-consciousness, I am contending, is shown in the Transcendental Deduction (with my suggested extensions) to be originally generated by the transcendental unity of apperception, which is constituted by the pure 'concept' of the transcendental object, through the categories as qualitative unity, prior to the unity of space and time, and the logical forms of judgment in the empirical subject.

As referred to previously, this *a priori* determination of empirical consciousness by transcendental consciousness is termed by Kant "the synthetic principle of apperception" in the A-deduction - all the variety of empirical consciousness must be combined in one underlying transcendental self-consciousness - the "first principle of our thought in general" (A117 fn.). However, for Kant this transcendental synthesis through the categories is not (I contend) originally *for* the empirical unity of self-consciousness in inner sense in time and accompaniment by the "I think," but for the transcendental unity of apperception. I.e. for the pure understanding, in unifying the manifold given indeterminately in the pure forms of space and time (as receptivity), in the pure 'concept' (in the pure forms of space and time as spontaneity) of the transcendental object (as something in general outside sensibility or receptivity), prior to the unity of space and time and the empirical subject. Thus Kant's synthetic principle of apperception presupposes the *analytic* principle of the B-deduction - the necessary unity of "my representations" through the categories, which pure self-consciousness prescribes to itself, through its qualitative unity in the pure representation of the transcendental object (as "something in general") rather than to empirical consciousness.

The one-sided nature of Kant's 'transcendental understanding' as the highest or most general unity of self-consciousness, I have contended, can be balanced by my conception of the transcendental will as the transcendental object of transcendental theoretical (productive) synthesis, as the highest or most general (albeit indeterminate) unity of the pure practical. *Together* they provide the apex (for the human subject of both theoretical and practical reason) of the metaphysical objective unity of apperception, as a multi-level unity of self-consciousness also referring, at each level and with objective validity to a unity outside itself.

Thus we have found that the necessary unity of self-consciousness involved in experience, containing the necessary unity of both transcendental *and* empirical self-consciousness, is the *objective* unity of apperception, i.e. the one "I think" which relates empirical to transcendental consciousness through judgments - transcendental and empirical. At the lowest level of this objective unity of apperception an empirical judgment, referring to associated subjective representations in inner sense in time, obtains its *only* objective unity as a "judgment in general" of general logic, e.g. "p>q", which is itself grounded in the pure forms of both time and space, in the pure categories of cause and substance (as productive synthesis) in transcendental apperception (necessarily underlying time in general).

Thus judgments, as functions of unity among our representations, through which representations are brought to the objective unity of apperception through transcendental and empirical judgments, are a top-down movement from transcendental judgments *containing*, then empirical judgments *expressing*, the

objective unity of transcendental apperception, to judgments in and expressing the subjective unity of empirical apperception.

In reference to Kant's argument in §19, for example, representations of bodies and heaviness can be brought to the objective unity of apperception through an empirical judgment. But this is not firstly through a judgment such as "If I have an impression of lifting a body I also have an impression of weight" in empirical apperception - followed by the objective judgment "bodies are heavy" (expressing the objective unity of transcendental apperception rather than the associative unity of empirical consciousness) but vice-versa (since judgments in empirical apperception *presuppose* transcendental 'judgments' through the qualitative unity of the categories in transcendental apperception). In other words, as mentioned above, the application of *a priori synthetic* 'concepts' to appearances is top-down from the thing in itself (the *a priori synthetic* 'concept') to appearances, rather than vice-versa as in the customary view of our perceptual knowledge. Therefore the empirical object of an *a priori* synthetic 'concept', the appearance in space and time, also entails the penultimate (as far as we can know) 'thing in itself', the dual-aspect (transcendental will and knowledge) *a priori* synthetic 'concept,' in the pure forms of intuition as spontaneity, and its unknowable ultimate grounding, and consequently also, objectivity.

Summing up: As Kant holds that for the pure understanding the indeterminately "given" sensible manifold, in the pure forms of intuition (as receptivity), must be given *independently of the understanding* and prior to it (cf. B145/146), it follows that the understanding originally combines the manifold determinately (I contend) not as a unity in the 'concept' of the thinking subject of understanding, but as a unity (as Kant's 'analytic principle' of the pure understanding) in the pure 'concept' of an object in general affecting the subject (as 'something unknowable in general', outside sensibility).²⁶ For my view (rather than Kant's) this requires (for pure imaginative *analytic* reason rather than pure understanding) a *first* (top-down) analytic principle of apperception: the transcendental productive synthesis of pure theoretical reason (in the pure forms of intuition as spontaneity) in the pure 'concept' of its transcendental object or referent (a pure indeterminate *willing*, in the pure forms of intuition as spontaneity). The productive synthesis of pure theoretical reason is then followed by the next-level (downward) pure 'concept' (in the pure forms of intuition as spontaneity) of the individual will in general of pure practical reason. But it also requires these transcendental syntheses as necessitating the unity of empirical consciousness (for which other wills can only be thought indirectly) - i.e. Kant's synthetic principle of apperception (which will itself have two aspects on my view - the pure theoretical and the pure practical).

The problem is how to distinguish transcendental consciousness from empirical consciousness, as affecting and as affected in one consciousness, so that experience contains both. This is where the metaphysical objective unity of apperception, containing both transcendental and empirical consciousness, combined through transcendental and empirical judgments - comes in, through which alone representations can 'refer to objects and be modes of knowledge' (cf B137). (Including merely judgmental objects in

²⁶ An original combination in a determinate 'concept' of the thinking subject would have to take place in the pure forms of both time *and* space (as spontaneity), which would only be possible for a subject of will. But the pure forms of space and time (as spontaneity) cannot be originally combined determinately as will, which can only have determinate unity when first represented as a "given" object in general by transcendental productive (and reproductive) synthesis, for the determinate unity of 'space-time' in which the pure purposive will can operate (as an 'individual will in general of organic nature' [from the perspective of both a universal will & its further unification as an individual will within the former], as a further unification of 'space-time'), and thereby constitute the pure form of 'objective space'. I see inner sense in time as a further division in human nature (which makes perception and experience possible) *within* objective space (just as objective space is a further division within 'space-time'); and subjective inner sense in time (in which both subjective **and objective** representation are possible) a *further* division within the latter (i.e. within inner sense in time as the pure sensible intuition of space and the embodied subject's volitions and cognitions in inner sense in time as appearance of transcendental synthesis through the categories).

empirical apperception.)

As contended above, the most basic element of self-consciousness in this multi-level objective unity of apperception which I am putting forward (as a unity of self-consciousness also referring to a unity outside itself) is the *a priori* 'judgment' through the categories as qualitative unity (in the pure forms of intuition as spontaneity), of an object in general, through pure (productive) theoretical reason, together with the prior consciousness of its transcendental object, or transcendental referent, the indeterminate transcendental will, also a productive act in the pure forms of intuition as spontaneity, as the most basic activity of the pure practical for the human subject of will and knowledge, perhaps (as its highest space-temporal transcendental unity) as an "original aquisition"²⁷. But at the level of the pure universal subject, in the pure concept of itself (as 'something in general' expressing itself in the pure intuitive practical categories), this is the original production/creation of the latter (as far as we can know), and thus an original 'synthetic principle' of apperception (for the pure unknowable subject originally thinking/creating the categories [cf pp 91,92, for my later update on this], not for transcendental imaginative reason as an analytic principle).

16. The Rationale Of The Two Step B-Deduction

Kant seeks an answer to the question of how synthetic *a priori* concepts such as substance and cause are possible, if we only have the indirect effect of independent objects on our senses. The answer the deduction provides is that these concepts are not derived from the supposed effects of independent objects on our senses, but are *a priori* representations which make our experience of independent objects possible. To prove this necessary role of the *a priori* categories in our knowledge Kant has to show :- 1) That since *a priori intuitions are presupposed by a priori concepts* (for their objective reality), both kinds of representation are possible, which is covered respectively in the Aesthetic and in step one of the two-step deduction (§§20/21) where Kant's aim is to prove the possibility of the categories as *a priori modes of knowledge* of objects of an intuition in general (cf. B160).

2) For the objective reality of the categories as synthetic *a priori* concepts, valid of all objects of possible experience, the categorial synthesis of the manifold in the 'concept' of the object, which is the condition for the possibility of objects of intuition as transcendental synthesis, step one of the deduction, must also be proved to be the condition for the possibility of experience, and therefore of objects of experience (as empirical synthesis). This is addressed in step two of the deduction, where Kant's aim is to show that not only does the categorial synthesis of the manifold in the 'concept' of the object presuppose (for its objective reality) the pure forms of intuition (cf. §24), but pure intuition, which is required for empirical synthesis in inner sense in time, presupposes the pure categories (cf. §26). On my contention pure intuition, and therefore empirical synthesis in inner sense in time, also presupposes the individual will in general (in the pure forms of intuition as spontaneity) of pure practical reason, and therefore the possibility of experience and objects of experience *presupposes*, not just the pure categories of pure theoretical reason, but also the pure categories of pure practical reason.

A standard interpretation of the deduction concludes that the categories are held to be a priori concepts

²⁷ Ian Proops writes: In his reply to Eberhard, "On a Discovery," Kant explains why he terms even a priori concepts "acquired": "The Critique admits absolutely no divinely implanted [anerschaffene] or innate [angeborne] representations. It regards them all, whether they belong to intuition or to concepts of the understanding, as acquired." He allows however, that there is "an original acquisition (as the teachers of natural right formulate it)" which belongs both to the forms of intuition and to the Categories, and whose ground is "innate." (See "On a Discovery According to which Any New Critique of Pure Reason has Been Made Superfluous by an Earlier One," in Henry Allison "The Kant-Eberhard Controversy" [Baltimore: John Hopkins University Press, 1973] 221-2.)

because they make empirical knowledge of objects possible (by combining empirical intuitions determinately for judgment). However on my reading Kant's aim is to prove the *objective reality* of the categories as a **pure knowledge of objects**, by showing that they alone (which I hold will require the addition of the pure categories of pure practical reason for the validity of the argument), as well as being the conditions for the *a priori knowledge* of objects - through a transcendental synthesis underlying empirical consciousness, are thereby also the conditions for empirical knowledge (both of the object and of the subject). And therefore that all intuitions given to empirical consciousness in inner sense in time **can be related to an object in conformity with the categories**, which Kant holds constitutes the objective reality of the categories as synthetic *a priori concepts*.

Thus in my view Kant begins the two step deduction with a top-down argument from the intellectual and figurative syntheses of transcendental apperception to empirical experience in inner sense in time. The transcendental synthesis of the pure manifold of a given intuition, in a pure 'concept' of the transcendental object, is shown to be subject to the categories, and transcendental synthesis is a sufficient underlying condition (he argues) for the sensible unity of the intuition as it appears to empirical consciousness (through the effect of figurative synthesis on inner sense). This is followed by a bottom-up argument from the synthesis of apprehension in inner sense in time to its necessary conditions in the categories, in which Kant aims to prove (as the conclusion of the two step deduction) that an underlying categorial synthesis in the 'concept' of the object is both sufficient and necessary for the possibility of experience (as empirical synthesis). And that therefore the categories, whose objectively valid function as a priori concepts consists in making objects of intuition possible, through transcendental syntheses underlying empirical consciousness, are shown to have objective reality as synthetic a priori concepts, valid of all objects of possible experience.

In further support of this reading of the deduction - Kant states that in transcendental knowledge our guide is the possibility of experience: "The proof proceeds by showing that experience itself, and therefore the object of experience, would be impossible without a connection of this kind. Accordingly, the proof must also at the same time show the possibility of arriving synthetically and *a priori* at some knowledge of things which was not contained in the concepts of them" (B811).

See Robert S. Hartman:

..transcendental synthesis leads to direct ostensive proof.. This proof must be unique, and based on either *a priori* intuition or the possibility of experience. The manner of proving ostensively or directly proceeds from grounds to consequences, i.e. in the progressive method, 'by reviewing the whole series of grounds that can lead to the truth of a cognition by means of complete insight into its possibility.' ²⁸ While in mathematics it is *a priori* intuition that guides synthesis, 'in transcendental knowledge, so long as we are concerned only with concepts of the understanding, our guide is the possibility of experience'; ²⁹ and the proof proceeds by showing that experience itself, and therefore the object of experience, would be impossible without a connection not empirically contained in the concepts. In this way the *a priori* connections make for apodeictic certainty because the elements of experience, through transcendental analysis, have been extended in terms of the necessary and universal conditions of experience itself. Transcendental analysis

²⁸ B819 ²⁹ B811

makes for transcendental synthesis. ("Immanuel Kant, Logic", Translators Introduction, xcii-xcvi).

To conclude this section I will complete a Kantian quote given previously (p.34):

"..How is a priori cognition possible from synthetic judgments?.." "Cognition is a judgment out of which arises a concept having objective reality, that is a concept to which a corresponding object can be given in experience.." "However all experience consists of an intuition of an object, i.e. an immediate and individual representation through which the object is given for cognition, and of a concept, that is a representation mediated by a mark common to various objects whereby the object is thought - neither of these modes of representations constitutes a cognition by itself; and if synthetic a priori cognitions are to be given, then there must be a priori intuitions as well as a priori concepts, the possibility of which must be discussed before anything else; and then their objective reality must be proved by [showing that] their use is necessary in respect of the possibility of experience" (ProgressAA 20, 266.1770s - 80's). (cf. Robert S. Hartman in "Immanuel Kant, Logic")

17. The Priority Of The Categories To Pure Intuition

At the beginning of the A-deduction Kant suggests that a category, as an *a priori* concept not relating to experience, i.e. which is neither contained in the concept of possible experience nor consisting of elements of a possible experience, and which therefore has no content, since no intuition corresponds to it, is "only the logical form of a concept, not the concept itself through which something is thought" (A96).

Thus a category (as intellectual synthesis) can have *a priori* validity only as the logical form of a concept through which an object is thought (and requires both pure and empirical sensible intuition for its content, and reality, as an *a priori* concept). Kant's proof of the validity of the categories therefore consists in - 1) proving their validity as the logical form of the pure 'concept' of an object in general, prior to all concepts in the empirical subject, contained analytically in transcendental apperception, in the pure forms of intuition, as intellectual synthesis [§20], and figurative synthesis [§24], synthetically underlying the empirical consciousness of the given intuition; and 2) as underlying the latter synthetically *a priori* - as the transcendental logical form of a concept (as a schema in the transcendental imagination) through which alone sensible representations in empirical consciousness can be related (either sensibly or intellectually) to an object; and therefore as the transcendental logical form of synthetic *a priori* concepts. It is my contention, however, that the validity of this argument requires my suggested extension to include the pure practical categories (and a first [top-down] *synthetic principle* of apperception, of the pure original subject, along with the pure practical figurative and apprehensive syntheses).

Thus in Kant's seemingly contradictory statements about intuitions being prior to all concepts, but the transcendental unity of apperception (i.e. "the transcendental unity thought in the categories" cf. B152) being prior to all intuitions, he is not talking about the categories as fully fledged concepts (which contain both their transcendental and empirical content or application), but as their transcendental (intellectual and sensible combined) formal content - providing (he holds) both the unity of intuitions in the representation of an object prior to all thought (as the transcendental content of our concepts of cause and substance etc.) and the unity of space and time as pure intuitions, as *their* transcendental content "prior to all intuitions". This, it seems to me, contains no contradiction, notwithstanding the claims of non-conceptualists such as Wayne

Waxman³⁰ to the contrary. Against Waxman's view that the role of transcendental apperception in pure intuition is a non-conceptualising role, prior to the conceptualisation of perceptions through the categories, my own view (as with that of John McDowell³¹ and other conceptualists) is that the sensible manifold given in perception is already *in* conceptual shape, due (on my view) to the transcendental conceptualising role of pure apperception, and its effects on inner sense. The non-conceptual unity I have suggested Kant mistakenly left at the transcendental level of the pure intuition of space, however, in the Transcendental Deduction, may explain how some of the non-conceptual interpretations have come about, and this oversight needs to be remedied before validity can be claimed for the transcendental deduction of our synthetic *a priori concepts* (on either the 'conceptual' or 'non-conceptual' interpretations in my view).

Thus "the transcendental unity thought in the categories" (i.e. the transcendental unity of apperception) is a unification of sensibility in the pure 'concept' - in pure apperception - of an object in general, not the unity of the categories as fully fledged concepts - applied to given empirical intuitions through accompaniment by the "I think." This is why the proof of the objective reality of the categories as synthetic *a priori* concepts requires the proof of transcendental apperception as the *a priori* underlying ground of empirical consciousness. It then follows (with my suggested extension) that (B154) "Apperception and its synthetic unity, as the source of all combination, applies to the manifold of intuitions in general, and in the guise of the categories, prior to all sensible intuition (as its *a priori synthetic* unity) to objects in general."

18. The Possible Grounding Of The "Original Synthetic Unity Of Apperception" In The Categories

How (asks Wayne Waxman) can the original "synthetic unity of apperception" of the pure understanding (not to be confused with Kant's *synthetic principle* of apperception) be grounded in the categories, as "concepts", i.e. in universal representations, which presuppose the analytic unity of apperception, i.e. "I am I" (or "I" in general), which itself presupposes the original synthetic unity of apperception according to Kant?

The conceptual interpretation of the transcendental deduction faces this question - "How can the understanding and categories be the original ground of the unity of apperception as well as of all other unity?" The "I think" must be able to accompany all "my representations" for them to be my representations, i.e. to belong to my identical consciousness, but to be able to accompany anything in space and/or time presupposes the unity of the latter.³²

According to my interpretation, however, the original synthetic unity of apperception (grounded in the categories) itself unifies space and time, but not as an *accompaniment* by the "I think" and a category. Kant has to explain the categories as universals prior to all other unity. This, we have seen, requires empirical and transcendental levels of universality - namely (at the empirical level) the analytic unity of apperception ("I am I") as the identity of one "I think" - which must be able to accompany all "my representations" in inner sense in time - which on my thesis presupposes an original synthetic and analytic unity of apperception (as a combined synthesis) in a transcendental "I think" through the categories. The first 'moment' of the categories, as logical functions for transcendental apperception (for pure imaginative *reason* rather than

³⁰In "Kant's debt to the British Empiricists" in Paul Guyer, Ed. "Companion to Kant," and in "Kant and the empiricists: Understanding understanding."

³¹ E.g. in "On Pippin's Postscript." European Journal of Philosophy 15:3 2007 pp.395-410.

³² cf. Wayne Waxman: Apperception and the individuality of space and time (Chapter 4. Kant and the Empiricists: Vol. 2).

pure understanding, on my contention/ extension of Kant), is a pure *willing* in general in/of the pure sensible forms of intuition as spontaneity; and the second, third and forth moments of the categories, respectively, are the productive theoretical synthesis, the individual will in general of pure practical reason, and the schematised categories as transcendental determinations of time; through which as synthetic concepts in transcendental apperception the categories *precede* space and time and the objects and subjects in them, as their *a priori* ontological ground.

The above 'moments' of the categories, however, as logical functions contained analytically in the transcendental unity of apperception (of pure imaginative reason), presuppose, on my view, an original *synthetic* principle of apperception of the pure original subject, in the pure concept of itself (as 'something in general') expressing itself in the pure intuitive categories.

Waxman's question, of how the categories, as concepts or universals, can ground Kant's original synthetic unity of apperception prior to the analytic unity of apperception (I am I) which the SUA (through the possible accompaniment of the 'I think') presupposes, is another way of asking Kant's question at the beginning of the B-deduction: How can we be conscious of intuitions as representations (and therefore as accompaniable by the 'I think'), prior to accompaniment of the 'I think'? Kant's answer is: through the combined synthetic and analytic unity of the *a priori* categories in a transcendental 'I think', as qualitative unity, which generates the 'I think' of empirical apperception, and *its* synthetic and analytic unity of apperception, as quantitative unity, as well as generating the unity of space and time and all other unity. Thus Kant's question (on my reading) was intended to provide an answer to the question of how we can have synthetic *a priori* concepts, which is certainly not provided by holding that a non-conceptual psychological function (of the pure understanding) unifies pure space and time, in order to provide a unity of consciousness prior to (and to make possible) the accompaniment of the 'I think'. But the answer is provided, I hold, by my interpretation and suggested extension of Kant.

A SYNOPSIS OF THE B-DEDUCTION ACCORDING TO MY READING

§§15-19

Empirical intuitions (along with the pure intuitions of space and time which contain them) cannot be *given* as unities "by the object," and therefore presuppose combination by the subject. However combination is representation of the synthetic unity of the manifold, i.e. its combination in a concept. This implies an *a priori* concept of synthetic unity. But it cannot be a category as a logical function in which combination is already thought, i.e. as a "quantitative unity" applied by the empirical subject to intuitions given in the pure intuitions of space and time (as in §10). And therefore it implies an original synthetic unity of consciousness, which combines the indeterminately 'given' sensible manifold through the "qualitative unity" of the categories, i.e. as a unity of synthesis in a pure representation of the transcendental object affecting sensibility (as 'something in general'), rather than as a unity applied to an object (cf. §15,§12), in a pure understanding *a priori* with a necessary relation to sensibility. The act of understanding which brings representations into a synthetic unity of consciousness is the logical function of judgment, and the categories, as qualitative unity, are these functions of judgment in so far as they are grounded in pure apperception (underlying intuition in general), in combining the pure manifold of a given outer intuition in general in a pure representation of an object in general, prior to all thought in the empirical subject.

It follows (Kant argues) that the synthetic unity in consciousness of a given intuition, through which an object is represented, presupposes the *a priori* categories, and proves their objective validity in making experience of objects possible, through their application to intuition ('prior to all my determinate thought') both as an underlying qualitative unity in transcendental apperception, and subsequently as a top-down quantitative unity (in transcendental apperception) applied to intuition as receptively given to empirical consciousness, in providing the combined unity of the pure sensible intuitions of space and time (required for the conscious quantitative application of the categories as applied by the empirical subject in inner sense in time, in empirical apperception [not covered until the Schematism chapter]).

§§ 20 - 27 : The Two-Step Deduction

For the proof of the objective *reality* of the categories as synthetic *a priori* concepts, however, in making experience of objects *universally* possible through perception, Kant has to show that transcendental apperception is the synthetic *a priori* underlying ground not just of the empirical understanding (in the knowledge of objects) through connections which although not contained empirically in the concept of the object, are contained transcendentally in its concept, which is therefore *transcendentally analytic*; but also of the empirical unity of consciousness involved in perception, and therefore how synthetic *a priori* concepts are actually possible.

This requires a deduction in two steps:-

Step i.

"All sensible intuitions are subject to the categories, as conditions under which alone their manifold can come together in one consciousness" (B143). I.e. sensible intuitions can be experienced as "my representations" (of objects) prior to all thought in the empirical subject,

... T - The Transcendental Unity (or original synthetic unity) of apperception. It is an analytic principle in transcendental apperception that all my representations in a given intuition are in a synthetic unity in a pure 'concept' of the object, and the *a priori* categories (c) are the logical functions of judgment by which T refers sensible representations to an object (o). It follows that all intuitions given as a synthetic unity in

consciousness, prior to all thought, are subject to the *a priori* categories. Therefore "..the manifold of a given intuition is necessarily subject to the categories" (B143). (Kant's analytic principle of apperception.)

1) $\therefore T \supset (o \cdot c)$. All intuitions given as my representations (of an object) prior to all thought (i.e. in transcendental apperception) refer to an object in general through the categories. [And (§ 20) "All the manifold, therefore, so far as it 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 determination of the manifold of a given intuition (cf. §13)". Consequently, the manifold in a given [united] intuition "is necessarily subject to the categories." (B143)]

In §13 Kant distinguishes between the explanation of the categories as 'quid juris' - the explanation of the way in which concepts can relate to objects a priori, which thereby provides our entitlement to their use, Kant holds, from their explanation as 'quid facti' - the explanation of our possession of pure concepts of the understanding. After deriving the categories as quid facti, i.e. as 'concepts of an object in general' by means of which its intuition (in empirical consciousness) is regarded as determined by one of the functions for judgment of general logic (i.e. bottom-up from empirical self-consciousness), their transcendental deduction (quid juris) consists in their derivation (as quantitative unity in empirical consciousness), top-down from their grounding as qualitative unity, as logical functions of judgment for transcendental apperception.

Step ii.

2) (e ⊂ ⊃ T) T is a sufficient underlying condition for the empirical unity of consciousness involved in perception (e), as the effect of the figurative syntheses on inner sense; and e only if T, i.e. T is necessary for e, in affecting inner sense and thereby providing the *a priori* synthetic unity of the pure intuitions of space and time required for perception. "All synthesis, therefore, even that which renders perception possible, is subject to the categories; and since experience is knowledge by means of connected perceptions, the categories are conditions of the possibility of experience, and are therefore valid *a priori* for all objects of experience." (B161) (Kant's synthetic principle of apperception.) Which entails (for the unity of outer intuition in space and inner intuition in time) that experience requires the 'top-down' quantitative unity/application of categorial synthesis "prior to all my determinate thought" in inner sense in time. (In which the pure and empirical synthesis of apprehension, now from the perspective of the empirical subject of inner sense, can only take place through a categorial apperceptive synthesis in the pure concept of an object in general [whose transcendental referent is the prior transcendental synthesis through the categories] as part of Kant's synthetic principle of transcendental apperception [my *second* (from the top-down) synthetic principle of transcendental apperception), not as an analytic principle).

The following relates to my interpretation of reality rather than just of Kant, and should also supplement my points in 'Kant discussions between Frances R Shaw & Wayne Waxman': According to my present understanding I believe Kant only recognised (or at least certainly only referred to) the one synthesis of apprehension³³ (which does not affect my argument for the derivation of the logical forms of judgement from the categories and may in fact make it easier to follow, but causes multiple problems for Kant in my view).

³³ I would suggest however that B140, B143, B155, & B157 indicate that the 'synthesis of apprehension' of §26 would have been intended by Kant to include the synthesis of inner intuition alone (along with its top-down quantitative unity in the concept of the object) even though it is not given in an example, following the synthesis of outer intuition in necessary combination with inner intuition (in top-down quantitative unity in the concept of the object) which both of Kant's two perception examples in §26 deal with (but then again maybe that is 'my Kant' rather than Kant) [my current view (1/5/'24) is rather that the 2 perception examples can only correctly refer to the synthesis of inner intuition (which is shown to presuppose the prior transcendental syntheses)].

As I have referred to previously, on my view the categories must transcendentally determine objective space and time (my 'objective inner sense') before being utilised as transcendental determinations of subjective inner sense in time (cf e.g. p.42 above). Thus 'top-down quantitative unity' (in determining the unity of apprehensive synthesis in empirical consciousness 'prior to all thought') will involve the categories as transcendental determinations of objective space and time (my 'objective inner sense') before being utilised top-down as transcendental determinations of subjective inner sense in time (and therefore still 'prior to all my determinate thought' [as although this synthesis is, at the conscious level, the application of its pure concepts by the empirical subject in inner sense in time in relation to outer intuitions in space, it is, through the categories as 'pure concepts of synthesis' (of transcendental schematism), prior to its fully conscious realisation]). - Demonstrating the claim of my thesis that the logical forms of judgement of general logic derive from the categories, rather than vice versa. Kant's Schematism chapter demonstrates the 'bottom-up' quantitative unity of the categories (as the logical forms of judgement insofar as they 'determine intuitions for judgement') which presupposes the prior top-down quantitative unity (of the synthesis/ transition).

In talking about top-down quantitative unity of the categorial synthesis of 'subjective inner sense in time', following the top-down quantitative unity of the categorial synthesis of 'objective inner sense in time' (i.e. of outer intuition in necessary combination with inner intuition rather than inner intuition alone) 'prior to to all my determinate thought', I am talking about the quantitative unity of the categories needed for perception/s (which Kant required for his 'synthetic principle' of transcendental apperception) as 'my representations' prior to all thought. So I am saying that not only is 'top-down quantitative unity' of categorial synthesis required for the determination of outer intuition in necessary combination with inner intuition, but also for the following determination of inner intuition alone (my 'subjective inner sense in time'), through the categories as pure concepts of synthesis 'prior to all my determinate thought'.

As a further clarification, looking back to my 'Kant discussions between Frances R Shaw & Wayne Waxman': I implied there (as well as in earlier passages of this paper) that the categories can only be concepts for the empirical subject (including for the morally acting empirical subject) if they are thought in empirical apperception (i.e. in empirical self-consciousness) as quantitative unity (which requires Kant's Schematism chapter) as appearance of their a priori 'qualitative' unity. Whereas in my current research I recognise them as belonging in the transcendental deduction, as 'pure concepts of synthesis' of top-down quantitative unity (in transcendental apperception), prior to all my determinate thought, through the top-down quantitative unity of the transcendental determination of 'subjective inner sense in time' following that of the transcendental determination of 'objective inner sense in time' (as appearance of the a priori qualitative synthesis), referred to above. [Not to imply that there is any contradiction here; the analytic (qualitative) aspect of Kant's 'principle of the necessary synthetic unity of apperception' was required for the first step of the 2-step B deduction, and the synthetic (quantitative) aspect for the second step.]

Beyond this point I have presupposed the Schematism chapter (with my provisos regarding the transcendental deduction). Kant's transcendental deduction (including §26) purports to show how, through his 'analytic principle' followed by his 'synthetic principle' of the pure understanding, we represent objects (*a priori*) in space and time (i.e. in experience) 'prior to all my determinate thought' in the empirical subject. Kant leaves it to the Schematism chapter to attempt to show how the categories are applied in experience (rather than as the *a priori underlying* grounds of the possibility of experience, as in the transcendental

deduction), as synthetic *a priori judgments* (as ['bottom-up' rather than 'top-down'] 'quantitative unity' rather than 'qualitative unity').

3) \therefore e \supset (c . o) - From (1) & (2). I.e. all intuitions given as sensible representations in empirical consciousness in inner sense in time can be referred to an object, through the categories as both qualitative and quantitative unity, and therefore to both objects in general (including the pure concepts of space and time, which also require the categories) and objects in the particular in space and time (e.g. a determinate space).

4) es :: (c.o). We have an empirical unity of self-consciousness in inner sense in time, and therefore through the categories we have synthetic *a priori knowledge of the* spatio/temporal objects which affect us in inner sense in time. I.e. all the manifold given in empirical self-consciousness, in inner sense in time, is necessarily subject to the categorial syntheses of the manifold in a pure 'concept' of the object, and therefore the categories (through their qualitative unity being the underlying ground of, first, their top-down (in transcendental apperception), then their bottom-up, quantitative unity are "..valid a priori for all objects of experience" (B161). (A synthetic *a priori principle of* empirical apperception.).

The philosophical experiments³⁴ have shown that I have previously neglected to indicate that synthetic a priori (not just analytic a priori) categorial syntheses need to be proved to be necessary for experience (for the pure moral categorial syntheses this should be replaced with 'necessary for personhood' [cf pp 68,69]). Thus in the artificial (or non-standard) cases of the 'experiments' (including the case of the a priori material condition of experience), (and also because I am including the pure moral categories): since there is no transparency (for all) of an underlying necessary law, i.e. as 'top-down quantitative unity' (whether 'management' is acting in accordance with one or not), as there is in Kant's deduction of the pure theoretical categories (reflected in a 'united' intuition prior to all thought in inner sense in time), a further 'step' to the transcendental deduction of the synthetic a priori categories is therefore required (which allows the assistance of general logic): 5) Synthetic a priori representation requires (in addition to a prior top-down application which may be different for the different members making up 'all'), the bottom-up quantitative unity/application of the categorial judgments, i.e. their bottom-up application from private experience in inner sense in time, in empirical apperception, as necessary laws, by being thought alongside their schematism as transcendental determinations of time and subjective space, to their next step upward application as transcendental determinations of objective space; along with the public representation/certification (and presentation of the certificate to its rightful recipient in space and time [i.e., in the case of a thesis, to its author]), of the logical proofs/laws thought privately at the lower level, in empirical apperception (now [for the human being] 'inside my head' in objective space). (Step 5 supports my 'objective inner sense in time'/'subjective inner sense in time' distinction; in subjective inner sense in time both [indirect] objective, and subjective representation are possible, not just objective representation [which includes subjective perceptions, volitions, cognitions insofar as they are the effects of figurative synthesis on inner sense] as in objective inner sense in time [cf. e.g. p.74 fn.; p.98]).

The above synopsis (as 'my Kant's' transcendental deduction of the categories), can be assumed to include my extension and modification of Kant's arguments (in the *Opus postumum* as well as the *Critique*), to replace missing 'steps' through the pure intuitive categories and syntheses, necessarily including my *original* synthetic principle of apperception of the pure original subject of the categories, and the inclusion of

³⁴ My private related experimental research (plus collaborative research in the 'qualification project' based on my research).

the pure practical/technical figurative synthesis in 'my Kant's' 'synthetic principle of apperception'. The deduction of the pure practical moral categories has to be treated separately from the other categories, as it is not being claimed that the pure moral categories can be shown to be necessary (as well as being sufficient) for experience, by being proved to be necessary for the unity of sensible intuition (and therefore they cannot be derived in the same way as the other categories, and require their grounding in the pure original subject of the categories); or for that matter that the pure moral categories (as I have characterised them) can be proved to be *necessary* for the possibility of human experience at all (Kant's claim was just that 'pure desire' can be shown to be possible).

B155 in the transcendental deduction, and the footnote to it, indicate to me that Kant (perhaps unintentionally, in using the category of cause, in the transcendental reproductive synthesis, to refer to both causality by mechanism and causality by the will) includes a transcendental practical synthesis in his synthetic principle of apperception, as part of the theoretical synthesis. B155 -: "Even time itself we cannot represent, save in so far as we attend, in the *drawing* of a straight line (which has to serve as the outer figurative representation of time), merely to the act of the synthesis of the manifold whereby we successively determine inner sense, and in so doing attend to the succession of this determination in inner sense. Motion, as an act of the subject (not as a determination of an object), and therefore the synthesis of the manifold in space, first produces the concept of succession - if we abstract from this manifold and attend solely to the act through which we determine the *inner* sense according to its form. The understanding does not, therefore, find in inner sense such a combination of the manifold, but *produces* it, in that it *affects* that sense." Fn.a: "...Motion, however, considered as the describing of a space, is a pure act of the successive synthesis of the manifold in outer intuition in general by means of the productive imagination, and belongs not only to geometry, but even to transcendental philosophy."

I hold, however, that the pure theoretical and pure practical syntheses need to be clearly distinguished from each other, and a pure practical/technical synthesis following (and presupposing) the transcendental reproductive synthesis (in the transcendental 'concept' of the object) recognised as being *necessary* for the unity of the pure intuitions of space and time, for the validity and clarity of the transcendental deduction.

The transcendental deduction can be summed up in Kant's own words, quoted from the *Opus postumum* (22:58 - 22: 59, P. 216). - "The first act of the faculty of representation is that through which the subject makes itself into an object of its representations and belongs to *logic*. [It is a] representation through *concepts* or the *thought* of the given object, and is analytic. The second [act] contains the manifold given in intuition, insofar as that is represented under a principle of its aggregation; this [act] is thought synthetically a *priori* and belongs to *transcendental philosophy* (which contains synthetic knowledge *a priori* from concepts)."

CONCLUSION

It is my contention that Kant's arguments in the Transcendental Deduction of the Categories of the First Critique are invalid as they stand (that is if the "original synthetic unity of apperception" of the pure understanding is not itself recognised as presuming earlier and later transcendental syntheses of *pure spontaneity*, utilising *a priori categories* as logical functions of pure practical thought), including a first (top-down) *analytic* principle, of pure imaginative reason rather than pure understanding, which itself presupposes an original *synthetic principle* of apperception on my view, of the pure imaginative subject since the original subject expressing itself in the pure intuitive practical categories can only know itself through them as 'something in general'.

Kant starts the deduction by looking into the transcendental grounds of the "non-conceptual" pure receptive intuition of space of the Transcendental Aesthetic, which includes our intuition of "other parts of space from where we are ourselves situated". But the unity of this aspect of our pure intuition of space is overlooked by Kant in the transcendental deduction (remembering that for Kant all unity of intuitions [including the pure intuitions of space and time], as 'my representations of objects' prior to all thought, is provided by the underlying 'conceptual' spontaneity of the transcendental subject, i.e. pure apperception), which I have argued (in line with my interpretation and extension of Kant's later developments in the *Opus postumum*) is in this case a pure practical synthesis and categories, subsequent to the pure productive and reproductive theoretical syntheses in the 'concept' of the object (whose transcendental referent is a universal transcendental will, expressed indeterminately in the pure intuitive practical categories, I have contended).

This non-conceptual element that Kant has apparently left (or at least left unclear) at the transcendental level of the deduction perhaps explains why the Transcendental Deduction has been interpreted non-conceptually by various Kant scholars. If space is already given as a unity, non-conceptually, e.g. according to Matthew S. Rukgaber's view (cf.p.67), it would seem that any *preceding categorial* syntheses would not be *necessary* for our pure intuition of space, and therefore for the possibility of experience and its objects.

Another view, Wayne Waxman's,35 interprets Kant's original transcendental syntheses of the pure understanding as a non-conceptual unification of the indeterminately 'given' sensible manifold as a psychological function which produces 'pure space and time' as pre-conceptual unities, representing a pure unity of consciousness which can be accompanied by the 'I think' and categories, in an 'analytic unity of apperception' (self-identical consciousness) which presupposes the 'synthetic unity of apperception' of the pre-conceptual unification. Kant's "original synthetic unity of apperception" Waxman holds, cannot itself be produced by the 'I think' and categories, and instead implies an original non-categorial synthesis, as a 'qualitative unity' (as opposed to the quantitative unity³⁶ the categories supply), so that the categories can then be applied to the pure manifold of space and time (through the schematism of the categories as

³⁵ E.g. in "Universality and the Analytic Unity of Apperception in Kant: a Reading of CPR B133–4n." & "Kant discussions between Frances R Shaw & Wayne Waxman".

³⁶ As stated by W.W. in "Kant discussions between Frances R Shaw & Wayne Waxman": "I don't understand why you speak of the qualitative unity of apperception as the qualitative unity of the categories. At B131, Kant specifically characterises the unity of apperception as a unity that is presupposed by the category of unity (which presumably coincides with quantitative unity), the categories generally, and the logical functions. That is why he characterises the unity of apperception as "higher" than any of these, as being their "ground". It is this higher unity that is "qualitative", not the unity thought in the category of unity or any of the categories or any of the logical functions (logical functions bring about no other unity than the logical unity of judgment, i.e. the combination of concepts as subject and predicate, the combination of judgments as ground and consequent, etc.).

'transcendental determinations of time'), to which space and time and the empirical objects in them will necessarily conform, it is held, when a category is thought alongside its schema by the 'I think'.

It follows from this view that our perceptual consciousness of 'appearances' in sensible space and time (in the empirical subject), accompaniable by the "I think" of empirical apperception, is *(presumably)* all that we can know - anything external to it having merely problematic existence as 'transcendent noumena'. And again, no claim is being made that *a priori categories* are *necessary* for our pure intuitions, and therefore for the possibility of our experience and its objects.

Thus the non-conceptual interpretations of the transcendental deduction of the categories, for which the categories are not *necessary* for our pure intuitions of space and time, and therefore for the possibility of our experience in inner sense in time, cannot explain how the categories can be synthetic *a priori* concepts, which was Kant's stated goal for the deduction: "...I therefore call the explanation of the way in which concepts can relate to objects *a priori* their transcendental deduction..." (A85/B118)

My contention that our pure intuition of space presupposes a pure practical synthesis (through *a priori* categories as logical functions of pure practical thought), through which we transcendentally think an individual will in general in the pure forms of intuition (as spontaneity), can be argued analogously to Kant's argument (according to my interpretation) for the transcendental syntheses of the pure understanding. As it stands the transcendental deduction cannot prove that transcendental syntheses through *a priori* categories are either sufficient (needed for step one of the two-step deduction) or necessary (needed for step two of the two-step deduction) for the pure intuitions of space and time (and therefore for the possibility of experience and its objects).

Although Kant has shown that our pure intuition of space (of the Transcendental Aesthetic) as outer intuition of the world around us, presupposes the *a priori categories* for its unity, he has not shown that our pure intuition of space as the inner intuition of the 'moving subject' and its capacity for movement along the axes of the body, which I hold provides the intuition of 'other parts of space from where we are ourselves situated', requires underlying categories. It follows that underlying *a priori categories*, as qualitative unity in pure apperception, have not been shown to be necessary and sufficient for the possibility of experience, and therefore of objects of experience.

According to the extensions to Kant's arguments I have argued are required for their validity (so that pure categories of both theoretical and practical reason are together shown to be the *a priori underlying conditions* for the possibility of experience): the first, second, third and forth moments of pure apperception (as pure imaginative reason rather than pure understanding) are respectively - 1) an indeterminate *willing* in general in/of the pure forms of intuition, as pure practical rather than pure theoretical spontaneity; 2) the productive and reproductive syntheses of pure theoretical reason in the pure *concept* of the transcendental object; 3) the individual will in general of pure practical reason, which *thinks* a judgmental object in the pure forms of intuition (as pure sensible forms of pure practical thought); 4) my addition to Kant's 'synthetic principle of apperception': both the transcendental theoretical and practical syntheses as (separate) figurative syntheses, i.e. as determining *inner sense* in time, firstly through pure understanding and secondly through pure will.

The figurative synthesis of pure theoretical reason provides the receptive unity of our pure intuitions of space (outer aspect), and time, and our concept of universal causality (along with the other relational categories of substance and community), as necessarily applying to all outer objects, and our

consciousness of being affected by causal objects. Whereas the pure practical synthesis and categories provides our pure receptive intuition of space (inner aspect, by which we intuit other parts of space from where we are ourselves situated), as well as our concept of ourselves as an 'immaterial' substance in inner sense in time, freely causing our own bodily movement in space, and indirect representation of other individual wills moving their own bodies in space and time according to purposes.

Thus the pure practical synthesis and categories, as figurative synthesis (affect on inner sense) does not give us the concept of being affected by objects under necessary causal laws, as with the figurative synthesis of the pure understanding, but of our own 'volitions' in inner sense in time, in moving our own body according to purposes. Both aspects are involved in (and are necessary for) our intuition of objects in space and time 'prior to all thought', and need to be part of a transcendental deduction of our pure concepts I hold, and (additionally) together provide the compatibility of purposive will and mechanistic determinism. When taken together however (which appears to be Kant's position in the *Opus postumum*, and perhaps unconsciously in the Transcendental Deduction), the pure theoretical and practical figurative syntheses provide one coordinated 'concept' of 'moving force' in space and time, and its effects on inner sense.

A fifth 'moment' of categorial synthesis is through the schematised categories (of pure theoretical and practical reason) as rules of judgment for the empirical subject of knowledge and will, in inner sense in time, through which the categories as quantitative unity, grounded in their schemata as transcendental determinations of time (and 'subjective space'), are applied as synthetic *a priori concepts* to objects of experience. By which our pure concepts have the *transcendental content* of 'pure synthesis represented universally' for both the transcendental and empirical subject. The schematised categories thus providing a link or mediation between the qualitative unity/application of the categories and their quantitative unity/application, as synthetic *a priori* concepts. (The schematism cannot supply 'transcendental determinations of time', however, unless the *a priori* categories are *necessary for our pure intuitions of time and space*, which my claim is that Kant has not shown in the transcendental deduction.)

The problem the schematism addresses is how to distinguish transcendental self-consciousness from empirical consciousness, as affecting and as affected in one consciousness, so that experience contains both and the pure concepts necessarily apply to both. In this thesis I have contended that through a *metaphysical objective unity of apperception alone* (necessarily containing both transparency and privacy) can Kant's requirement be met of an "objective unity of apperception" through which our representations can "refer to objects and be modes of knowledge" (cf. B137), thus 'referring at each level and with objective validity to a unity outside itself' (cf. p.73 above).

The top transcendental 'level', for the human subject of will & knowledge (as an analytic principle for transcendental imaginative reason) consists in the pure productive theoretical synthesis and its transcendental object or referent - the pure indeterminate will, which itself cannot refer to itself determinately as thing in itself (outside the categories) "..the subject of the categories cannot know itself [as ultimate thing in itself] through the categories...". But it does refer to itself outside the categories through a synthetic *a priori* judgment (as an original synthetic principle of transcendental apperception) - of itself as something in general creating and expressing itself in the pure practical forms of transcendental thought. I.e. although not referring to itself analytically through the categories, it is referring (through the pure intuitive categories) to its creative self outside the categories, through an objectively valid (necessary) judgment, as the *a priori* ontological ground of all other unity.

The metaphysical objective unity of apperception includes, at its lowest transcendental level, 'merely judgmental objects' in empirical apperception, in which an empirical judgment, referring e.g. to subjective associated representations in inner sense in time, obtains its <u>only</u> objective unity & validity as a 'judgment in general' of general logic, e.g. 'p.q', itself grounded in the pure forms of intuition, in the pure categories of substance and cause, in transcendental apperception, necessarily underlying time in general, I have argued.

It has to be noted that the different levels of my analysis have to be kept that way. The transcendental unity of apperception is 'that representation which cannot be accompanied by any further representation' *on that level*, or from that perspective. Transcendental judgments of pure imaginative reason, on my thesis, are 'functions of unity among our representations' which combine the different levels, and the pure imaginative subject (in combining the different levels) must stand above the different levels it combines (and itself presupposes an original synthetic principle of apperception).

In other words the combined SUA and AUA of pure imaginative reason, in combining the different levels (in one thought) through the categories (an analytic *principle* of apperception), presupposes an original synthetic *principle* of apperception: the pure subject of will's pure concept of itself (as something in general) originally producing/creating the pure intuitive categories in the pure concept of itself (the original synthetic unity of apperception and analytic *unity of apperception* at its highest point). (Thus referring to the origination of its own pure act of will outside the categories as pure practical thought not as knowledge - i.e. not referring with objective validity to a knowable unity beyond itself). But this original synthetic principle of apperception, thought in the pure forms of intuition (as spontaneity), although referring ultimately to a judgmental object not itself given in any kind of intuition, is referring with objective validity to the higher unity of self-consciousness in the *a priori practical categories*, as logical functions of judgment in the pure forms of intuition (as spontaneity), as the *a priori underlying ground* of all other unity, including the unity of my identical self-consciousness in inner sense in time, and therefore also belongs in the metaphysical objective unity of apperception I am putting forward. (See also Wolfgang Carl's reference to Kant's early characterisation of the categories as 'functions of apperception' in "Kant's First Drafts of the Deduction of the Categories").

For the unity of my identical consciousness in inner sense in time the 'I think' must be able to accompany, as a synthetic unity, all the manifold in space and time. But this presupposes (if it is agreed that all unity is due to combination by the subject) that the pure manifold of space and time has itself been combined - by an original synthetic unity of self-consciousness, for the 'I think' to be *able* to accompany all the manifold in space and time. The analytic unity of consciousness obtained by the 'I think' being able to accompany all the manifold in space and time belongs to all general concepts (in empirical consciousness) as such, and includes the categories, as pure concepts of the understanding, e.g.- "All events in space and time have a cause". Therefore the analytic unity of consciousness (my identical consciousness in inner sense in time) and all general concepts as such (thought through the possible accompaniment of the manifold by the I think) presuppose the original SUA, which combines the pure forms of space and time as a unity in one consciousness, prior to all accompaniment by the 'I think'. Therefore the original SUA cannot be provided by accompanying the pure forms of space and time by the 'I think' (as any accompaniment by the 'I think' presupposes the OSUA). [Excerpt from 'Kant discussions between Frances R. Shaw & Wayne Waxman' (2009)]

Wayne Waxman concludes from this that the original SUA is a non-cognitive synthetic unity of self-consciousness, which combines pure space and time as synthetic unities in one consciousness as a psychological function, so that the manifold can be accompanied by the one 'I think'. Whereas I conclude that an OSUA combines the pure forms of intuition in the pure 'concept' of an object in general (through the transcendental content of the categories) which provides, jointly, the unity of space and time, the unity of my self-identical consciousness, and the unity of empirical intuitions - as objects in space and time, "prior to all my determinate thought". This OSUA therefore provides an AUA which belongs to the transcendental content of the categories - as necessary 'concepts' in a necessary unity of consciousness - which are universal (for empirical consciousness) in being the *a priori underlying* ground of the unity of all empirical intuitions; and it is this OSUA which generates the empirical 'I think', which can now accompany the same intuitions as analytical concepts.

Therefore although the OSUA cannot be constituted by general concepts thought through accompaniment of the manifold by the 'I think', in the case of the categories the OSUA is constituted by the *transcendental content* of these concepts, as "pure synthesis represented universally". In other words as pure synthesis in the pure forms of intuition, as the *a priori* underlying ground of all empirical synthesis (of apprehension/reproduction/recognition in a concept, of the A-deduction) - which explains how the categories are *a priori* concepts (for the empirical subject in inner sense in time).

For added clarity - further excerpts from 'Kant discussions between Frances R Shaw and Wayne Waxman', & from earlier chapters of this thesis.

Kant discussions between W.W. & F.S:

WW: I'm sorry but you still don't seem to address the objection. Here it is again:

- 1. B133-4n states that there can be no concepts until there is AUA.
- 2. AUA presupposes SUA.
- 3. Since there can be no concepts until there is AUA and there can be no AUA until there is SUA, this SUA cannot be based on, or in any way involve, concepts.
- 4. The categories are concepts.
- 5. Therefore, the categories cannot be conditions, grounds, or in any other way involved in, the production of the SUA presupposed by AUA.
- 6. Since you claim that the categories are always involved in the production of SUA, B133-4n contradicts your position. [NB:The argument pre-dated my research on the pure productive practical synthesis (as an original synthetic principle of transcendental apperception), however I am certainly still claiming that the categories are involved in this *a priori* productive synthesis by the pure imaginative subject of the categories (as the representation of its original creative act) F.S.]

[WW (continued)] Nothing in this argument turns on the distinction between empirical and transcendental apperception. The empirical isn't mentioned at all; time and the temporal aren't mentioned; and indeed I think the argument applies whether the mind's pure intuitions are in time, as in the human case, or other kinds of pure intuition altogether beyond our ken.

FS: In attempting to explain how (as the proposed ground of the OSUA) the categories, as "concepts", can be prior to the AUA which makes all general concepts possible, I argued that the categories as *a priori*

'concepts' in the AUA of transcendental apperception, can belong to the OSUA prior to the AUA as formulated by you, i.e. as the analytic unity of empirical apperception (through the accompaniment of the manifold by the I think).

However I agree that I did not spend enough time on how the categories, through the *a priori productive synthesis*, which is held to ground the OSUA at its most general, can be prior to the AUA of transcendental apperception insofar as it contains the categories as *a priori* universals (through reproductive syntheses based on the productive synthesis).

Your original objection can be clarified as :-

- 1) There can be no general concepts as such without AUA.
- 2) AUA presupposes the OSUA for the original combination of the sensible manifold in one consciousness.
- 3) Therefore the OSUA cannot be based on general concepts as such requiring the AUA which presupposes SUA (and therefore presupposes that the manifold is already unified in one consciousness.)
- 4) Therefore the OSUA cannot be based on the categories as general concepts as such.
- 5) Therefore if the OSUA is based on the categories it is not based on them as general concepts as such.
- 6) The AUA of the atemporal productive synthesis, through the categories, is prior to the AUA of the temporal reproductive synthesis through the categories in which the categories function universally in transcendental apperception.
- 7) The AUA, or the unity of my self-identical consciousness due to the productive synthesis through the categories, comes from the synthetic unity of the pure forms of intuition, as "my representations" in one transcendental representation of an object in general. Thus the original combination through the categories is not based on the synthetic unity of the categories as concepts or logical functions of judgment, but is the original creation of these ("the epigenesis of pure reason") through the pure or formal representation of an object in general. Through which the categories can therefore serve as logical functions of judgment as their *a priori* ontological ground, and as logical functions of judgment "serving for concepts" in transcendental logic (proleg.), because they are the *a priori underlying* ground of the unity of intuitions in general, and are therefore principles of necessary judgments.

Thus the AUA of "my representations," through productive synthesis of the pure understanding, comes from the synthesis of the pure forms of intuition in the pure representation of an object in general. This productive synthesis through the categories only becomes universal for transcendental apperception when it is represented as the ground of the transcendental reproductive synthesis.

However the categories only become pure concepts of the understanding, i.e. a pure concept of an object (for Kant), when the transcendental synthesis through them is represented universally for the empirical subject - which requires an object to be given in intuition in space and time (the categories in their original synthesis of the manifold by the pure understanding having as their object the transcendental object of transcendental synthesis - as something in general outside sensibility or receptivity.)

Therefore the unity of consciousness at its most basic (for the pure understanding) consists in the pure representation, in the pure forms of intuition as spontaneity (underlying the pure intuition of the 'space-time' of the transcendental subject, I have suggested) of an object in general - as the *a priori* ground of the one "I think". [In my later research (as an extension of my interpretation of Kant) I hold that both the transcendental productive synthesis and its transcendental object or referent, identified as an indeterminate pure *willing in*

the pure forms of intuition (as spontaneity), together provide the unity of consciousness at its most basic (for pure imaginative reason [as an analytic principle itself presupposing an original productive synthetic principle of pure imaginative reason] rather than pure understanding).]

4. The Subjective Unity Of Empirical Apperception (p.19 above):

Allison and other commentators see Kant's statement that the empirical unity of apperception (i.e. my representations in inner sense in time accompaniable by the "I think") has only subjective validity (cf. B140), as contradicting his claim that the logical form of all judgments consists in "the objective unity of the apperception of the concepts which they contain" (B141). However it seems to me that this contradiction is merely an artifact of their own interpretations. In reply to the charge of inconsistency it has to be borne in mind that the transcendental unity of apperception, described by Kant as an objective unity of apperception, consists in the combination of sensible representations in a pure or formal concept of the object, through a necessary relation between the understanding and sensibility, not the accompaniment of sensible representations by the pure concept of an object. (This is proved by the fact that Kant describes pure apperception, that is, the necessary relation of sensibility to the "I think," as "that representation which cannot be accompanied by any further representation.") (B133)

[As I have noted above, the transcendental synthesis of the pure understanding cannot be accompanied by any further representation on that transcendental level, the level of the pure understanding. As we know, Kant's analysis did not include the pure imaginative reason I have put forward as combining, a priori, the transcendental level of the pure theoretical with that of the pure practical (which I have argued is required for the a priori unity of our pure intuitions of space and time). The categories were seen by Kant as combining the empirical and transcendental levels of the understanding, but not as combining different transcendental levels (in one thought, as a combined SUA and AUA) of an objectively valid reason (thus belonging in the Transcendental Analytic). Through the original synthetic principle of apperception I have put forward as being presupposed by the analytic principle (of pure imaginative reason), the pure imaginative subject of the categories cannot know itself through the categories as the ultimate thing in itself originally producing the categories (in the pure concept of itself), but only as its uppermost appearance or representation. Thus as appearance this is not originally a representation of itself as the analytic principle of apperception of pure imaginative reason, through which the categories combine the different levels (in one transcendental thought), as 'functions of unity among our representations', but as pure imaginative reason (and its combined SUA and AUA) as a productive principle of self-consciousness, i.e. as a 'synthetic universal', which can transcendentally combine pure theoretical reason (and the correlated pure technical/ practical reason) with pure moral/ practical reason.

Unfortunately it follows that even more complexity is required. It can be seen that as the 'uppermost appearance' of the original pure concept of itself as a 'synthetic principle' referring to its creating self (as something in general outside the categories), additionally the pure imaginative subject's pure concept (through the pure practical categories) of its creating self, as a productive *a priori* transcendental synthesis in the pure forms of intuition (as spontaneity), is also a synthetic principle of apperception. Whereas the pure productive practical categories as logical functions for pure imaginative reason, as an 'original acquisition' (as the highest space-temporal synthesis in the metaphysical objective unity of apperception), is analytic for transcendental imagination. This is actually parallel to Kant's productive syntheses of the pure

understanding in the original pure concept of the transcendental object, as intellectual synthesis, or as its uppermost appearance in the pure forms of sensibility, in transcendental imagination (according to my interpretation of Kant's transcendental deduction). The transcendental pure practical imagination as both a synthetic and analytic universal may (or may not) perhaps relate to Kant's 'determining' & 'determinant' judgment in the *Critique of Judgment* (which I have not studied in depth), and his notion of a 'synthetic universal' intellect.]

Thus the objective unity of apperception which empirical judgments share with transcendental judgments must be the pure combination of the representations involved into a single thought - through a logical function of judgment, not the accompaniment of sensible representations by an act of judgment. Therefore the only objective unity of apperception involved in an empirical judgment such as "If I lift a body I feel an impression of weight" is the combination of the representations involved into a single thought, through the universal form of judgment " $p \supset q$ ". Thus the empirical unity of apperception is only a subjectively valid unity of consciousness because it is a merely associative unity of representations in inner sense in time, which can be accompanied by empirical thought, for example the thought that "If I lift a body I feel an impression of weight." Whereas the latter judgment on its own contains an objective unity of apperception - in its combination of the representations involved into a single thought, through the logical form of judgment " $p \supset q$."

Therefore Kant's statement that "The logical form of all judgments consists in the objective unity of the apperception of the concepts which they contain" does not mean, for example, that the associated impressions of the lifting of a body and feeling of weight are accompanied, in empirical self-consciousness, by an act of judgment, but that representations of the lifting of the body and feeling of weight are combined into one thought, through a universal form of judgment.

Thus the relation of sensible representations to an object through transcendental apperception is an objective unity of apperception in virtue of its referring these representations (through a universal function of judgment) to an object of judgment, but it refers them to "weighty" objects in virtue of this combination in the concept of the object taking place in the pure forms of intuition, as a synthesis in general underlying empirical consciousness, which thereby refers the intuitions to both the empirical and transcendental object of intuition.

The above discussion explains why the empirical judgment "Bodies are heavy" (in addition to containing an objective unity of apperception through the logical form of judgment "s is p") is held by Kant to express an objective unity of apperception as an empirical judgment, that is, to express an objectively valid relation of empirical representations in consciousness, while the empirical judgment "If I lift a body I feel an impression of weight" expresses only a subjectively valid unity in consciousness. In the former case the sensible representations of bodies and heaviness are already united in the objective unity of transcendental apperception, in the formal concept of the object, prior to this objective unity being expressed by the empirical judgment "Bodies are heavy." The fact that bodies and heaviness are united under a pure concept of the object, through pure apperception, explains how prior to all my determinate thought I can perceive bodies as being heavy, that is, can comprehend them as combined "in the object" (B142). The explanation is that bodies and heaviness are already united in the necessary unity of consciousness, through the categories, which can (through continuous approximation) combine associated empirical representations under an empirical causal law (as a function of transcendental thought), rather than that these

representations necessarily belong to one another in the intuition, ("Bodies are heavy" being only a contingent judgment), or that they belong together as things in themselves outside sensibility.

Thus subjective associations of sensible representations in empirical apprehension are brought to the objective unity of transcendental apperception by being combined, synthetically *a priori*, under the transcendental 'concept' of the object (through the categories). This objective unity in transcendental apperception (as 'bottom-up' quantitative unity) can then be expressed through an empirical judgment such as "Bodies are heavy." That is, the sensible representations of bodies and heaviness can be comprehended through an empirical judgment as synthetically united in one apperception, that is as "bodies are heavy" because they have already been combined as an objective unity through the necessary unity of consciousness. (That is, they already belong to my representation of the object, in transcendental apperception, because they *can be* combined through an empirical law of nature, as a "special determination" of the category of cause.) If sensible perceptions in space and time were only combined through laws of subjective association (á la Hume) we could only perceive that "If I lift a body I feel an impression of weight" (or less confusingly "If I have an impression of lifting a body I also have an impression of weight."), not that "It, the body, is heavy" (B142). In other words the empirical representations of bodies and heaviness could only be subjectively related in consciousness.

Thus the way representations are brought under one objective apperception is through the logical functions of judgment. And the categories, in transcendental apperception, are these functions of judgment for the combination of intuitions (rather than concepts) in the objective unity of apperception.

The original synthetic unity of consciousness is therefore an objective condition of all knowledge (cf.B138). -Through which all the manifold of sensible intuition is united in a concept of the object, and in particular, through which the pure forms of sensible intuition are united in the pure 'concept' of an object in general. As found earlier, original apperception can only express its "I think" in the pure forms of both space and time, and thus outer intuition has both a sensible and intellectual pure form, which, in combination, and as underlying perceptual consciousness, provide us with *a priori* knowledge of objects, as appearances of their transcendental ground (and unknowable ultimate ground).

6. A Retrospective View Of The Two Step Deduction (p.22 above):

[In relation to the pure understanding and pure theoretical reason] the deeper meaning of the deduction, however, is that through it the categories are shown to be *synthetic a priori* judgments, in pure intuition, referring empirical intuitions to the transcendental object of intuition. The categories are necessary and sufficient not just for the relation of sensible representations to a phenomenal object of figurative synthesis (i.e. to the figurative synthesis itself), but to a transcendental object of figurative synthesis, i.e. to "something in general" outside sensibility or receptivity. Although all intuitions, in so far as they are given as my representations of objects, prior to all thought, are analytically subject to the categories as logical functions of judgment, this analytic relation of intuitions to the categories presupposes an original synthesis through which the "given" manifold of sensibility is combined *synthetically a priori* through the categories, in a pure representation of the transcendental object affecting sensibility. That is, to be "my representations" in the transcendental understanding the *given sensible manifold* (containing the undetermined manifold of both outer and inner intuition), has to be brought into an objective unity of consciousness through the categories, since the sensible manifold is given "prior to and independently of" any synthesis by the understanding

(B145). (Otherwise the categories would not be concepts of given objects, but concepts through which the object itself was given, making the object purely subjective to the transcendental subject of understanding.)

10. The Necessary Unity of Self-Consciousness as the Necessary Unity of Judgement (p.62 above):

We have seen that Kant holds that "the logical form of all judgments consists in the objective unity of the apperception of the concepts they contain," i.e. consists in the role of the judgment in the metaphysical objective unity of apperception. Which is to say that it consists in a unity of self-consciousness which also refers to a unity outside itself, or indirectly, constituting objective knowledge when the unity outside itself is also given determinately *in* intuition - not just in the associative unity of appearances in inner sense in time (from which only subjective knowledge is possible), but also in the objective unity of appearances in outer intuition in space, in transcendental apperception. - The judgments in empirical apperception are subsumed under the transcendental qualitative unity of the categories synthetically *a priori* (ultimately grounded in pure intuition in general in the pure 'concept' of the transcendental object). Through concepts, Kant states, an immediate representation is subsumed under a higher representation. In *a priori* synthetic concepts however, the universal, or higher representation, is given before the immediate representation in empirical consciousness in inner sense in time (which it underlies synthetically *a priori*), rather than vice versa, as in empirical concepts. Hence the necessity of the former in relation to experience.

It follows that a pure concept of the understanding, insofar as it is thought by the empirical subject in inner sense in time independently of its schema, must emerge from a top down productive synthesis of the transcendental imagination, to empirical synthesis in inner sense in time. The transcendental deduction shows that the categories are originally thought in the pure forms of intuition, in the pure 'concept' of the transcendental object, in transcendental apperception, not as independent of intuition, or as schemata as transcendental determinations of time - which are rules of judgment for the *empirical subject*. (The Schematism chapter shows how the schematised categories are applied in experience.)

For theoretical reason [when considered separately from practical reason] the categories are thus originally thought in the pure understanding as productive syntheses of the transcendental imagination, in the pure forms of intuition - in the pure 'concept' of the transcendental object, through which intuitions are represented as objects prior to all thought in the empirical subject. This is followed by the transcendental synthesis through the categories insofar as it necessitates the unity of empirical consciousness. This necessitation being not just sufficient but necessary for the unity of the pure intuitions of space and time, and therefore for perception, Kant holds. The schemata, as transcendental determinations of time, are thereby produced through the pure 'concept' of the transcendental object in so far as it necessitates the unity of time in inner sense. The pure synthesis of appearances in (subjective) space and time (by the empirical subject) according to the quantitative unity of the categories, can now be represented universally through the schemata of the categories as transcendental determinations of time, and therefore the categories apply necessarily to all appearances in sensible space and time, and can be thought by the empirical subject independently of their schemata, but only as subjective thought, not as knowledge.

Thus schemata are necessary for knowledge through the categories, in which objects represented directly in the transcendental unity of apperception are known indirectly in empirical apperception; and therefore a schema judgment, applied to appearances in subjective space and time by the empirical subject (and grounded universally as a transcendental determination of time), refers indirectly but

necessarily to appearances combined in objective space and time through transcendental apperception, and therefore provides for both empirical and synthetic *a priori* knowledge of objects of experience.

Thus we cannot start with the category as a pure concept derived from the logical forms of judgment in the empirical subject, in inner sense in time, which is applied to given outer intuitions in space through a schematised category. We have to start with the pure category in the pure forms of intuition in the transcendental subject, prior to the unity of the pure intuitions of space and time, and therefore prior to all thought in the empirical subject, and the logical forms of judgment of general logic - as their *a priori* ontological ground.

Thus the universality of the categories prior to all other unity can only be as the pure (sensible and intellectual combined) intuitive forms of transcendental thought. And the *original synthetic unity of apperception* can only be the transcendental subject expressing itself in the pure forms of transcendental thought: firstly as an indeterminate willing in general in/of the pure forms of intuition (as *free* self-activity), followed by the transcendental productive synthesis of pure theoretical reason, in the pure 'concept' of its transcendental object, which (together with transcendental reproductive synthesis) determines the unity of space-time. Followed by the pure 'concept' of the individual will in general of pure practical reason (and its effects [as a further figurative synthesis to that of the pure theoretical] on inner sense); i.e. as determining the unity of both objective *and* subjective space, as well as providing the concept of ourselves as cause (when considered separately from the preceding figurative synthesis of pure theoretical reason, in its affects on inner sense [refer above, p.87]).

When the underlying transcendental reproductive synthesis in the *concept of the object* is determined according to empirical laws (through transcendental imaginative synthesis), we (as empirical subjects in inner sense in time) can think its (empirical) transcendental referent (the one will of matter [as a necessary material condition of experience]) indirectly (presumably as expressing, in the pure forms of intuition as spontaneity, pure general 'thoughts' such as 'I want').

The empirical laws of matter, though not 'a priori' are nonetheless necessary syntheses (in intuition in general) in pure apperception, in the subject in general, which as 'special determinations' of the categories, are applied (at the level of experience, by the empirical subject) as quantitative unity (grounded in the schematism as transcendental determinations of time, itself grounded in the transcendental syntheses as qualitative unity), but as 'judgments of experience' as I have argued previously. Showing (1) how the AUA of empirical apperception through the application of a category presupposes the AUA of transcendental apperception through the category; and (2) how not just the AUA of the particular empirical application of a category presupposes the AUA of the qualitative transcendental application of the category, but vice versa, how the latter, the analytic transcendental application of the category presupposes [for its empirical laws of thought under the pure categories] the former, the empirical application [or insertion] of the category. Thus the perspectival 'space-time' of individuals [itself presupposed by space and time = 'objective inner sense in time' (and additionally in [at least] human beings 'subjective inner sense in time')] presupposes both empirical space-time and space-time in general, and empirical space-time presupposes both space-time in general and the perspectival space-time [and space and time] of individuals.

When the empirical laws of matter are applied (transcendentally), the manifold in space and time as given to empirical consciousness in perception (apart from the aspects relevant to the empirical law being

applied), as well as the transcendental syntheses of pure practical reason, have to be 'extracted from'. The transcendental unification by purposive will is a *further unification* of the transcendental laws applying in space-time, and is not under necessary mechanistic laws (though it is grounded in them).

Thus Kant leaves out the 'thing in itself' we have transcendental consciousness of as the subject of purposive (and general) will, and 'non-conceptual' views about the embodied subject and its capacity for bodily movement in space 'prior to all thought', or 'non-conceptual' acts of the transcendental understanding, which provide our pure intuitions of space and time prior to the application of the categories in any shape or form, leave out the transcendental subject of *knowledge* we have transcendental consciousness of, as another aspect of the *same* (*transcendental*) 'thing in itself'.

Objects in space and time are a coordination of transcendental will and transcendental knowledge on my view, so both aspects are required both as thing in itself and as appearance. Together they provide (in addition to the unity of space and time) both our concept of events under mechanistic causal laws, and our concept of ourselves as cause of our own bodily movement, but no concept of purposive wills being under necessary mechanistic laws (as transcendentally they are a further unification of the latter), but as freely acting according to purposes *in* space and time.

It was held by Kant in the First Critique that we have consciousness of ourselves as the subject of transcendental synthesis (cf.e.g. B157) but not knowledge of it (which would require our intuition of it), but that as we can (problematically) conceive the possibility of an "intellectual intuition" of ourselves, we can at least think of our transcendental self as separable from the empirical subject in inner sense in time (i.e. as appearance). In my thesis I claim to have put forward (as an explanation of how our concepts can relate to objects *a priori*) the beginnings of an objectively valid metaphysics of a universal transcendental subject - the pure imaginative subject of will and knowledge as a (penultimate) transcendental thing in itself. The objective reality of the latter consists in its *a priori* operations in the pure forms of intuition as spontaneity (i.e. as pure forms of transcendental thought), as the *a priori* underlying ground of all experience.

Kant states that in transcendental knowledge our guide is the possibility of experience: "The proof proceeds by showing that experience itself, and therefore the object of experience, would be impossible without a connection of this kind. Accordingly, the proof must also at the same time show the possibility of arriving synthetically and a priori at some knowledge of things which was not [empirically]* contained in the concepts of them" (B811). In the case of the will, and the pure practical/technical categories (as pure practical functions of pure practical thought), this is their transcendental grounding in the original synthetic unity of apperception (which also provides the analytic unity of apperception [self identical consciousness] of the pure imaginative reason I have argued for), itself transcendentally grounding Kant's 'original synthetic unity of apperception' of the pure understanding. It also had to be proved that the pure practical categories (as a priori purposes) are dependent on transcendental logic (on my interpretation of it), rather than on the logical functions and concepts of pure general logic.

If I have been successful in proving that an individual purposive will in general (as the *a priori* underlying ground of any purposive will in the particular) is also (subsequently to the transcendental syntheses in the pure 'concept' of the object) necessary for our pure intuition of space, and therefore for our empirical experience in inner sense in time, this requirement has been met; and therefore transcendental apperception has been proved to be the *a priori underlying ground of empirical apperception*. **And the**

^{*} My insertion

categories (logical functions of judgment for transcendental apperception) are therefore valid *a priori* for all objects of our possible experience, as synthetic *a priori* concepts, grounded in their schematism as transcendental determinations of time and 'subjective space'. (As with the theoretical categories however, the pure practical categories can also be thought without being grounded in their schematism, but only as subjective thought, not as synthetic *a priori* knowledge). For example a synthetic *a priori* judgment about the moral worth of our own actions (in the special case of the pure practical/moral categories) would be grounded (top-down) in the pure rational will in general, in pure practical moral reason, in the pure forms of intuition as spontaneity, as 'idea'. Thus the objects of our possible experience necessarily include both inner and outer aspects (grounded top-down and transcendentally in pure practical and theoretical categories, in the transcendental 'thing in itself' I have argued for, i.e. the *a priori* synthetic 'concept' of possible experience in space and time).

The 'gap' that Kant has apparently left in the transcendental deduction can readily explain how some of the "non-conceptual" interpretations of the transcendental deduction may have come about. Kant's later deliberations in the *Opus postumum*, however, in which he realised (on my interpretation) that the 'moving subject' in general and the ground of matter as 'ether' - as the *a priori material condition* of experience, were needed for the unity of space, indicate that this apparent non - conceptual unity at the transcendental level of the deduction was an oversight which he now needed to rectify, to "fill a gap" in his Critical system (for the transition to physics and experience to be possible).

BIBLIOGRAPHY

Allison, Henry E. <i>Idealism and Freedom</i> : Essays on Kant's Theoretical and Practical Philosophy.
"Apperception and Analyticity in the B-Deduction", P.41. Cambridge: Cambridge University Press,
1996.
"Kant's Non-Sequitur." Kant-Studien 62 (1971), pp. 367-77.
Kant's Theory of Freedom. Cambridge: Cambridge University Press, 1990.
Kant's Transcendental Idealism: An Interpretation and Defense. New Haven: Yale University
Press, 2004, & 1983 (pp.147-149).
The Kant-Eberhard Controversy [Baltimore: John Hopkins University Press, 1973] "On a
Discovery According to which Any New Critique of Pure Reason has Been Made Superfluous by an
Earlier One," pp.221-2.
Carl, Wolfgang. "Kant's First Drafts of the Deduction of the Categories" (pp.3 - 20), in Kant's
Transcendental Deductions: The Three Critiques and The Opus postumum. ECKART FÖRSTER
Editor. STANFORD UNIVERSITY PRESS Stanford California,1989.
Chalmers, David J. The Conscious Mind: In Search of a Fundamental Theory. New York, United
States, Oxford University Press Inc.,1998.
Friedman, Michael. Kant and the Exact Sciences, Harvard University Press, 1992.
Ginsborg, Hannah. http://philosophy.berkeley.edu/people/page/23 "Was Kant a Non-conceptualist?",
Philosophical Studies 137 (1) (2008), 65–77.
Guyer, Paul. ed. <i>The Cambridge Companion to Kant</i> . Cambridge: Cambridge University Press, 1992.
Kant and the Claims of Knowledge. Cambridge and New York: Cambridge University Press, 1987.
Hartman, Robert S. Introduction to "Immanuel Kant, Logic", 1974.
Hegel, G.W.F. <i>Phenomenology of Spirit</i> .Trans. A. V. Miller with Analysis of the Text and Foreword by J.
N. Findlay, F.B.A., F.A.A.A.S. Oxford University Press, 1977.
Henrich, Dieter. "The proof Structure of Kant's Transcendental Deduction", in Ralph C. S. Walker, Ed.
Kant on Pure Reason, pp. 66-81. (From Review of Metaphysics 22, 640-59.)
Kant, Immanuel. Critique of the Power of Judgment. The Cambridge Edition of the Works of Immanuel
Kant, trans. Paul Guyer and Eric Matthews. Cambridge: Cambridge University Press, 2000.
Critique of Pure Reason, trans. Norman Kemp Smith. New York: St. Martin's Press, 1929.
Groundwork of the Metaphysics of Morals. Trans. H.J. Paton, in "The moral Law" by H.J. Paton,
Hutchinson of London, 1948.
Inaugural Dissertation, 1770. Trans. William J. Eckoff. Columbia College, New York, 1894.
Logic, in "Immanuel Kant, Logic". Translation and introduction by Robert S. Hartman and
Wolfgang Schwarz, 1974.
Opus postumum. The Cambridge Edition of the Works of Immanuel Kant, translated by Eckart
Förster. Cambridge: Cambridge University Press, 1993.
Prolegomena To Any Future Metaphysics That Can Qualify as a Science, trans. Paul Carus. Open
Court Publishing, 1902.

Kemp Smith, Norman (1923). A commentary to the Critique of Pure Reason. 2nd edition, pp.219-220. London: Macmillan.

- Klotz, Christian, & Nour, Soraya. "The legitimating fact in the transcendental deduction of the categories. On Dieter Henrich's reading of Kant." Criterion, Belo Horizonte, v.48, n.115, p. 145-165, 2007.
- Kripke, Saul, A. "Naming and Necessity". Princeton University Colloquium lectures, 1970.
- Longuenesse, Beatrice. Kant and the Capacity to Judge. Sensibility and discursivity in the transcendental analytic of the Critique Of Pure Reason. Princeton University Press, Princeton and Oxford,1998.
- Magee, Bryan. The Philosophy of Schopenhauer. Clarendon Press: Oxford, Oxford University Press: New York, 1983
- McDowell, John, Henry. Mind and World, Harvard University Press, 1996.
- Merritt, Melissa McBay (2004) Drawing from the Sources of Reason: Reflective Self-knowledge in Kant's First Critique. Doctoral Dissertation, University of Pittsburgh. (Unpublished)
- Pippin, Robert. Kant's Theory of Form: An Essay on the Critique of Pure Reason. Yale University Press, 1982.
- _____. "McDowell's Germans: response to 'On Pippin's Postscript.' by John McDowell." The European Journal of Philosophy, vol. 15, no. 3.
- Proops, Ian. "Kant's Legal Metaphor and the Nature of a Deduction." Journal of The History of Philosophy, volume 41, Number 2, April 2003, pp.209-229.
- Rodl, Sebastian. "Eliminating Externality." International Yearbook of German Idealism, Band 5, Berllin: de Gruyter 2008.
- _____. "Logical Form as a Relation to the Object." PHILOSOPHICAL TOPICS VOL. 34, NOS. 1 & 2, SPRING AND FALL 2006
- Rukgaber, Matthew S. "The key to transcendental philosophy': space, time and the body in Kant." pp. 166-186, Kant Studien 2009.
- Ryle, Gilbert. "The Concept of Mind". 1949.
- Schopenhauer, Arthur. The World as Will and Representation, trans. by E. F. Payne. New York: Dover, 1969.
- Strawson, P.E. The Bounds of Sense: An Essay on Kant's Critique of Pure Reason. London: Methuen, 1966.
- Van Cleve, James. Problems from Kant. Oxford: Oxford University Press, 1999.
- Waxman, Wayne. Kant's Anatomy of the Intelligent Mind. Oxford University Press, 2014.
- _____.Kant and the Empiricists: Vol. 2. Understanding Understanding, Ch. 4. "Apperception and the individuality of space and time". Oxford University Press, 2005.
- _____.Kant's Model of the Mind. Oxford University Press, 1991.
- _____."Universality and the Analytic Unity of Apperception in Kant: a Reading of CPR B133–4n.", in Maynooth Philosophical Papers, Issue 5 (2008), ed. by Simon Nolan (Maynooth: Department of
 - Philosophy, National University of Ireland, Maynooth, 2009), pp. 42–48. MPP_2008_Universality_Kant_WW.pdf http://eprints.maynoothuniversity.ie/1557/1/MPP_2008_Universality_Kant_WW.pdf
- Wicks, Robert. Routledge Philosophy Guidebook to Kant on Judgement (London:Routledge, 2006).
- Young, Julian. Willing and Unwilling: A Study in the Philosophy of Arthur Schopenhauer (© 1987 by

Springer Science+Business Media Dordrecht Originally published by Martinus Nijhoff Publishers, Dordrecht in 1987). Softcover reprint of the hardcover 1st edition 1987