Kant: Critique of Pure Reason Lecture §7

B edition Transcendental Deduction

A lot of water had flowed under the bridge by the time of the second edition of the *CPR* in 1787. Kant had written the *Prolegomena* and the *Metaphysical First Principles* of *Natural Science*, as well as his first book on the metaphysics of morality. After a period where public reaction and responses to the critical philosophy were few and far between, Kant had been brought to center stage by his contribution to the controversy centering on Jacobi and Mendelssohn concerning the supposed Spinozism of Lessing.

The first indication of Kant's desire to recast the deduction can be found in a lengthy footnote (two full pages of text) in the Preface to the Metaphysical First Principles of Natural Science (1786). In it, Kant addresses himself to a criticism of the first Critique by the anonymous reviewer of a book by a certain Ulrich which Kant condenses into the claim that "without a completely clear and adequate deduction of the categories the system of the CPR would totter on its foundation." Kant rejects this, asserting that even if the T.D. were faulty and had to be rejected, the main conclusions of his philosophy would stand unalterated and unassailable. That is, his criticism of metaphysics, based on the limitation of knowledge to appearances (i.e. the unknowability of things in themselves, including God, freedom, and immortality), is quite independent of the T.D. So long as the conclusions of the Trans. Ass. and the Metaphysical Deduction are accepted (i.e. the analysis of space and time and the derivation of the categories from logical forms of judgment), the critique of reason possesses apodeictic certainty, T.D. or no T.D.: "For if it can be proved that the categories which reason must make use of in all its cognition can have no other employment whatever than that merely with reference to objects of experience (in such a way that in this experience the categories make possible merely the form of thought), then the answer to the question how they make such form of thought possible is indeed important enough for completing this deduction, where possible; but in reference to the main purpose of the system, namely, the determination of the boundary of pure reason, the answer to how is in no way necessary but is merely meritorious. For this purpose the deduction is already carried far enough when it shows that the categories which are thought are nothing but mere forms of judgments insofar as these forms are applied to intuitions (which with us are always sensible only), and that by such application our intuitions first of all obtain objects and become cognitions; showing these things already suffices to establish with complete certainty the whole system of the Critique proper."

Kant then offers an interesting comparison: "Thus Newton's system of universal gravitation is well-established, even though it carries with it the difficulty that one cannot explain how attraction at a distance is possible. But difficulties are not doubts." The point of the analogy is that Kant, though by no means wishing to downplay the T.D. (he could not have been blind to what is obvious to us, viz. that although the most difficult part of his system, it is also the most powerful, his finest and most important piece of philosophical writing), even if one is not convinced by it (or, more likely, fails to understand it), it is not essential for the basic, overall implication of the theory. An even more appropriate analogy than Newton, not available to Kant, would be Darwin: neither Darwin nor anyone else with even slightly unblinkered eyes, can doubt the *fact* of evolution; *that* evolution happened is as certain as any fact about the remote past can be, and it was accepted by virtually every educated person from the moment the *Origin of Species*

appeared. Controversy arose not around this, but around the question of the mechanisms of evolution and speciation, that is, not around the fact that it occurred but around how it occurred. It took almost a century before a concensus emerged among biologists that Darwin had been right all along: evolution occurs by natural selection. Of course, today, Darwin's name tends to be identified with natural selection even more than with his proofs that evolution occurred, for it is natural selection that gives evolutionary biologists their explanatory paradigm and research program. This, I believe, is exactly how Kant would have us view his theory: if one accepts the transcendental aesthetic and metaphysical deduction, there can be no doubt that we can only know appearances, never things in themselves; but as for the theory advanced in the T.D. to answer the question how a priori cognition even of appearances is possible by means of categories, the mechanisms of such knowledge, Kant is more circumspect. Just as for Darwin the main point was evolution itself — the basic fact that must be accepted and according to which we must modify our beliefs and actions — so too for Kant the main point is the limitation of knowledge to appearances, for to accept this is to be obliged to modify one's beliefs and actions to conform to the new brand of moral philosophy Kant had begun to offer the world by this time. Nevertheless, Kant is as certain as Darwin would be later that he had found the mechanism and offered full and complete proof that he had; moreover, also like Darwin, he undoubtedly regarded it as his most important positive contribution to philosophical science, for that is exactly what the T.D. is: the foundation and outline of a science of a priori cognition of objects, laying the foundation and architectonic for both the metaphysics of nature and the metaphysics of virtue and right.

But I have not yet gotten to the part of the footnote which heralds the B edition revision of the T.D. After restating the premises of the argument for the limitation of cognition to appearances (very clearly and at some length — a most useful text for you to consider), he states: "It follows that no employment of pure reason can ever concern anything but objects of experience; and inasmuch as nothing empirical can be the condition in a priori principles, these cannot be anything more than principles of the possibility of experience generally. This alone is the true and adequate foundation of the determination of the boundary of pure reason, but is not the solution of the problem as to how experience is possible by means of these categories, and only by means of them. Although even without this problem the structure stands firm, this problem nevertheless has great importance, and, as I now see, equally great facility, inasmuch as it can be solved almost by a single conclusion from the precisely determined definition of a judgment in general (an act by which given representations first become cognitions of an object). The obscurity which in this part of the deduction attaches to my previous treatment, and which I do not deny, is attributable to the usual fortune of the understanding in inquiry, the shortest way being commonly not the first which it becomes aware of. Therefore I shall take the earliest opportunity to make up this defect (which concerns only the manner of the presentation and not the ground of explanation, which is already given correctly there), without my acute review's being placed in the — doubtless to himself — disagreeable necessity of taking refuge in a preestablished harmony because of the surprising agreement of appearances with the laws of the understanding, even though the latter have sources quite different from the former — a remedy far worse than the evil which it is intended to cure and against which it really is no avail at all." Better to say nothing about how we know appearances than revert to myths of preestablished harmony. As for his own account, Kant is guite clear that the A Deduction is not defective; it did not fail to give the categories an unassailable deduction. Yet, it did so in a manner that was somewhat roundabout and obscure, and so difficult for others to take

on board. More significantly, Kant believes he has found the shortest route by which to make the case so clearly that no one any longer will have an excuse to resist his conclusions: *the precisely determined definition of a judgment in general.*

This enunciated in paragraph §19 of the Deduction, which is where I hope to get today. So, let us begin at the beginning. Global difference from A version: in A, the intellectual (apperception) and the transcendento-psychological (imagination) and sensible (time) are intertwined from the outset, whereas in B Kant focuses almost exclusively on the former, introducing the transcendento-psychological only in §24 (figurative synthesis) and the sensible only in §26 (formal intuition).

§15: The Possibility of Combination in General

Deduction B begins with two results established in Deduction A (which is further evidence of their interdependence): "the combination (conjunctio) of a manifold in general can never come into us through the senses and so too cannot be included in the form of sensible intuition at the same time; for it is an act of the spontaneity of the faculty of representation, and since one must call this, in order to distinguish it from sensibility, understanding, all combination, whether we are conscious of it or not, be it a combination of the manifold of intuition or of various concepts, and, in the first case, whether it is sensible intuition or non-sensible, it is an act of understanding, to which we attach the universal denomination synthesis in order thereby to take note that we can represent nothing as combined in the object without its have been previously combined by ourselves, and among all representations combin-ation is the only one which is not given through objects but can only be executed by the subject itself, because it is an act of its self-activity. It is readily evident that this action must originally be unitary and equipollent for all combination, and that its decomposition, analysis, which seems to be its opposite, always however presupposes it. For where the understanding has previously combined nothing, there can also be nothing to decompose, because only through understanding can anything be given to the faculty of representation as combined." The two claims taken over from Deduction A are: all synthesis is spontaneity and affinity — here termed combination is grounded not on objects but the subject.

Nor is this all that is being presupposed, as the sequel, an analysis of the concept 'combination,' makes clear: "the concept of combination leads not only to the concept of the manifold and its synthesis, but also to the unity of that manifold. Combination is representation of the synthetic unity of the manifold." Here Kant attaches a note saying that this holds true even for analytic judgments, for what matters is the simple fact that subject and predicate of a judgment are distinct as representations, that is, the consciousness of the one and of the other are distinct, at least in the temporal order of our train of thought, and it is the synthesis of one such consciousness with another into a single, synthetic consciousness, that is here at issue (i.e. the many-in-one structure of synthesis, which applies even to the judgment A is A, since the two A's are temporally distinct representations in our thought). The main text then continues: "The representation of this unity [synthetic unity of the manifold] thus cannot arise from combination; it rather is that which, by being added to the representation of the manifold, first makes combination possible. This unity, which precedes all concepts of combination a priori, is not the category of unity considered earlier (§10); for all categories are grounded on logical functions in judgments, but in these combination is already thought, and so too unity of given concepts [i.e. synthetic unity of concepts in one consciousness, i.e. it is presupposed in any judgment; it is of course the unity of the subject which judges, not anything that enters into the judgment itself. Thus, the category already presupposes combination. Hence, we must look still higher for this unity (as qualitative §12), namely in that which itself contains the found of the unity of various concepts in judging, hence the possibility of the understanding even in its logical employment." It is hard to be

quite sure how to interpret this claim. The higher to which we are supposed to look may mean either a higher generality or something prior in the sense of a presupposition. The reference to qualitative unity and section §12 does not seem to help much. There (B114) Kant cautions us against confusing the material, transcendental categories of unity, plurality, and totality, which pertain to the possibility of the things themselves which we think, with the formal, methodological categories of unity, plurality, and totality, which govern not things but the thought of things; that is, they are criteria of cognition, marking the difference between good and bad cognition of an object. It is this latter sense of unity that Kant 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 (Zus.fassung) of the manifold cognition, as perhaps the unity of theme in a drama, of a speech, or of a fable." (cf. Hume *EHU* §3) What is common to the whole, its unity, its concept. The unity of combination is the theme as it were of all representation insofar as it is cognitive; all our representations must be ordered under some common representation, and that common element is the unity of apperception. It is a formal unity, a formal common element, the bare form of a universal, but a universal common to all the manifold as such insofar as it is capable of being employed for cognition of an object. The I think (AUA) as super-concept, the a priori universal under which all the manifold is necessarily contained

§16: On the Original-Synthetic Unity of Apperception

Having guided us to the vantage point from which to glimpse this unity, Kant comes straight to the point: "the *I think* must be *able* to accompany all my representations; for otherwise something would be represented in me which could not be thought at all, which is just to say that the representation would either be impossible or at least be nothing for me." Any

¹Although normally unremarked, the really surprising thing about Kant's claim that the I think must be able to accompany all representations is his belief that it possibly might not. For instead of saying outright that it is impossible that something be represented in me which the I think could not accompany, he asserts only that it would be nothing for me. One may therefore query, first, what Kant could have had in mind when he allowed that something might be represented in me and yet not be my representation, i.e. not belong to a consciousness of myself. Second, what are the two me's here in question — the me in which it is represented and the me to which it would be nothing if unaccompaniable by an I think? Are they the same or different? If different, are they related?, and if related, how? But third, and most importantly, how is it possible, in the first place, for synthetic unity of apperception — the ground of the identity of the subject (analytic unity) — to fail to obtain? It seems self-evident that everything represented in me, by that very reason, must belong to one and the same consciousness, namely, mine. Kant clearly took the contrary to be a genuine possibility (see A97, A116, A121-2, B134, and A156-7/B195-6). The most likely reason is that, for him, it was a necessary consequence of transcendental idealism (see note §39 above) that synthesis, and so too synthetic unity, can never come to us via the senses (and, a fortiori, via the object existing in itself), but must always be generated through "an act of the self-activity of the subject" (B130). For it follows from this that sensations are unifiable in consciousness only in and through the synthesizing action (spontaneity) of the imagination and understanding; that is, data of the senses are not given to a unitary consciousness, that consciousness has instead to be produced. To hold this is to allow the possibility that there might very well be not one me, but many, perhaps even as many as there are representations. For if unity of consciousness must be introduced into our representations, it follows that, unless and until it is, I would "have as many-colored and diverse a self as I have representations of which I am conscious" (B134) and "a multitude of

representation impossible to accompany with an I think can be nothing to me, the thinker common to (identical for) these representations (this is why Kant describes it as an analytic thesis: if I cannot think it, it cannot be mine; if it is mine, I must be able to think it; dthe I think is contained, like a common mark, in absolutely everything that is thinkable as such, i.e. in each representation that is anything for me). So every representation, including especially intuitions that have yet to be thought in a concept, must have a relation to the I think if it is to be possible to combined these intuitions with concepts so as to produce cognition: "that representation which can be given prior to all thinking is called *intuition*. Thus, all the manifold of intuition has a necessary relation to the *I think*, in the same subject in which this manifold is encountered." The subject referred to here may be the subject in itself, or the transcendental subject, but, to be on the safe side, let us just call it the representing subject, i.e. spontaneity, which at B422n, is said to be neither appearance nor thing in itself but something real in fact given to thought alone. For Kant proceeds straightaway to state that "this representation is an act of spontaneity, i.e. it cannot be regarded as belonging to sensibility." He then gives several designations for this representation, each to be preferred according to the context; pure apperception, if one wishes to distinguish it from empirical self-consciousness; original apperception because, although the I think it produces may accompany every other thinkable representation, there is none further which must be able to accompany it, which is just to say that it is the highest unity of our representations, the only thing all necessarily share in common insofar as they are to serve for cognition, i.e. nothing else is possible common to it and to anything else, actual or possible — it is the highest universal (concept, qualitative unity). As the source of a priori cognitions, Kant calls it transcendental apperception (this aspect emerges when its relation to judgment is clarified in §\$19-20, i.e. how it makes possible objectively valid synthetic a priori judgments). And he also terms it a *universal self-consciousness*, in part, to contrast it with individual self-consciousness, that is, empirical self-consciousenss, personal identity, etc., but also with logical universality in mind: the self-consciousness common to all representations, that in virtue of which they acquire universal scope, and to the I think as the ground of the possibility of concepts and judgments, that is, the possibility of analysis: the process of transforming representations into concepts. This seems the most plausible to me since he immediately proceeds to raise the issue of the relation between synthesis and analysis.

He states first that each empirical consciousness (= apprehension) is independent and isolated. What then unites them so that all are *mine*, so that *my* identity is *common* to all? Only if the representations contained in them connect up with one another by means of synthesis, can the isolated empirical consciousness which accompanies them be united with other such consciousnesses. That is, only if, and insofar as, the contents of distinct apprehensions are synthesized with one another according to a common ground of unity is it possible for the apprehensions themselves to constitute a single, numerically identical consciousness. This unitary consciousness is only possible insofar as I conjoin my representations and am conscious of the unity of the synthesis: "only by my being able to combine a manifold of given representations *in one*

consciousness is it possible for me to represent the identity of the consciousness in these representations, that is, the analytical unity of apperception is possible only on the presupposition of some synthetic unity.* [No ¶ in K's text: KS liberty] Accordingly, the thought that these representations given in intuition one and all belong to me [= AUA as identity /universlity] means the same as [the thought that] I unite them in one self-consciousness, or can at least so unite them [=SUA]; and although this thought is not the consciousness of the synthesis of the representations [the singular intuitive consciousness of it is pure space and time, the universal conceptual consciousness the categories, it presupposes the possibility of that synthesis, that is, only by conceiving (begreifen) the manifold of representations in one consciousness do I can them one and all my representations." The basic point is rather simple: if I am not, as Kant says, to have as many-colored and diverse a self as I have distinct apprehensions, these various apprehensions must be combined in a single (or, rather, universal), allembracing consciousness, which I can call mine — a consciousness formed out of the qualitative unity of this synthesis, that is, the principles to which their synthesis necessarily and universally conforms (= logical functions = unity of the act of ordering different representations under a common one). Since such a consciousness presupposes a synthesis of representations, it cannot be given, but must be produced through the synthesizing act of the representing subject. (It also means the unity can only be thought, never intuited, hence that it exists only in and for understanding (thought), not sensibility (intuition).) Thus, the analytic principle of the necessary unity of apperception "reveals that a synthesis of the manifold given in an intuition to be necessary" (again, that the *I think* must accompany all my thoughts is analytic because they would not be my thoughts if I could not think them). Thus Kant has the conclusion he is after in §16: the unification of all the manifold of intuition in one consciousness effected by means of a synthesis.

Before we proceed, there is a footnote in §16 that demands our attention. There Kant takes the principle that synthetic unity of the manifold in one consciousness precedes and makes possible the analytic unity, the I think, which, as I suggested earlier, though non-manifold, still has the form of a concept (universality) and applies it to actual concepts in general, the form of which, as I said last time, is the I think; he thereby explains the grounds and possibility of logic itself, and so too all thought in general and as such: "The analytic unity of consciousness attaches to all universal concepts as such, e.g. if I think red in general, then I represent thereby a property (Beschaf.) which, as a constituent character [i.e. a concept falling in the intension of another, one of its conceptual ingredients], can be met with somewhere, or can be combined with representations; hence, only by means of a previously thought possible synthetic unity can I represent the analytical unity. A representation which is supposed to be thought as common to distinct representations is regarded as belonging to such as having in them,

²Cf. Hume: in the appendix, his problem is the unity of successive perceptions in consciousness (SUA), not the representation of an identity in those perceptions (AUA). There are several intermediate steps which bring out the distinction: given the compresence in consciousness of successive perceptions, (i) the imagination can then set about associating perceptions and forming customs, until there emerges (ii) a system of perceptions linked in relations of cause and effect; but this is still not sufficient for AUA: (iii) the feeling in successively contemplating the same relation of ideas must be felt to be so resembling to the feeling in successively contemplating the same idea repeatedly (perfect identity) that the two are confounded, and identity is ascribed to the former and (iv) the contradition of this feeling with the evident appearance of perceptual flux disregarded. Hume's problem was that, by rejecting real bonds between perceptions or between perceptions and subtrata, he could not explain SUA — how successive perceptions could be together in our consciousness. Kant could because he denied the absolute reality of succession just as he did the absolute reality of substance and causation.

besides, something distinct; consequently, it must be thought previously in synthetic unity with other (albeit only possible representations), before I can think in it the analytic unity of consciousness which makes it into a conceptus communis. And thus the synthetic unity of apperception is the highest point to which all employment of the understanding, even the whole of logic, and in accordance with it, transcendental philosophy, must be fixed, indeed this capacity (Vermögen) is the understanding itself." We should interpret the representations here in question as just that: data as yet unobjectified; mere indeterminate appearances not yet determined as representations of empirical objects; there are as yet no proper objects (individuals, be it events or things) as subjects of predication (just associated bundles).] Here the various strands of the metaphysical deduction and transcendental deduction are woven together as they are perhaps nowhere else in all of Kant's writings. We find a bridge from the Met Ded, esp. B105, to the Trans Ded:

Given: concepts rest on functions (A68/B93)

- Ø functions are what need to be added to representations to make them into concepts (analysis — A76/B102)
- Ø AUA is what needs to be added to ordinary representations to make them into concepts (B133n.)
- Ø function AUA (cf. A108)
- Ø SUA is the condition for the possibility of the application of logical functions to the manifold, whereby the manifold is made thinkable in a concept
- Ø logical functions furnish the analytic unity whereby diverse representations can be ordered under a common representation (universal, predicate-concept), but also (B105) give unity to the synthesis of the manifold in such a way that everything thus synthesized is orderable under a common representation. I.e. that logical functions give unity to the synthesis of the manifold (B105) means (i) they are the unity of the synthesis in SUA and (ii) AUA is the universal common representation under all representations are consequently orderable conformably to logical functions. : Since the logical functions yield categories, the first piece of the Trans. Ded. is in
- place.

What the T.D. adds to the M.D. is the equation of the unity of the logical function with the unity of the I think, where the I think is interpreted as an AUA, and thereby as a necessary condition for any representation to belong to me or to be thought in a judgment. The conformity of the synthesis of intuitions to the unity defined by the logical functions is thus demonstrated to be a condition for the *mineness* of any representation (any that does not conform cannot belong to me, and therefore can be ignored since as such it is nothing to me) and for the *conceivability* of any intuited representation (the ability to represent it universally, in a concept, and so use it as a predicate to make judgments).

What has yet to be shown are two things: (i) how this condition for thought is also a condition for cognitive thought (experience), and indeed of the very objects themselves we experience [the problem of proving that apperception is an objective unity, i.e. the affinity problem]; (ii) how the synthesis of the manifold can possibly conform to logical functions without violating its purely sensible, non-intellectual character (remember what logical functions are: they are mere forms of the unity of concepts in judgments, ways in which one universal can be combined with another; they are purely intellectual,

entirely void of sensible content and meaning. By contrast, the products of imaginative synthesis — perceptions and associations of perception — are not true universals, but mere bundles of perceptions collected in associative imagination; hence, it is not at all clear how they can possibly be supposed to conform to logical functions = **heterogeneity problem**). As it happens, both problems have the same solution: the status of space and time as original synthetic unities, a determination which Kant begins to make in §17.

AUA as basis of universals

But first let us consider in some detail the status of AUA as the necessary condition for any representation to attain the status of a universal. According to Kant, a concept, like 'red in general', emerges when an ordinary image of red is conjoined with the I think, qua analytic unity of apperception, that is, is thought by *me*. How is this to be understood?

The analytic unity of apperception is the representation of the thinker's own identity in relation to all the representations of his sensibility. It is the I of Descartes' cogito, but also something more: through it, otherwise ordinary representations acquire universal representative scope. For Kant, the ability to represent one's identity in relation to all the manifold (self-consciousness) and the capacity for universal representation (concepts) are one and the same (= analytic unity of apperception), and have one and the same condition of possibility: the original a priori synthetic unity of the manifold in one consciousness.

Given a priori synthetic unity of apperception, there is a necessary unity of all representations in a single, all-encompassing consciousness; and since I am nothing more than the identity of consciousness in respect of all the manifold made possible by this synthetic unity, no representation that fails to satisfy the conditions for this synthetic unity can be anything to me (see A116 and B131-2). The synthetic unity of all representations in one consciousness thus makes possible (see A117 n.) a representation, I think, to which all representations necessarily stand in relation. But this is just to say that the I think not only maintains an identity in relation to all the manifold, but also has a purview quite literally of universal scope. Nothing is thought in its representation save this universal relation to all the manifold as such; it is otherwise entirely devoid of content and determination. In consequence, however, any intuition of which I am conscious ipso facto partakes of the same universal scope that characterizes this consciousness of myself, and thereby acquires the form of a concept (= universality).

The I think is pure thought in much the same sense that pure space and time are pure intuition. For just as in the latter nothing is represented save the sheer form of an intuition as such (the *possibility* of juxtaposition or succession), so too, in self-consciousness, we represent only the sheer form of a concept (universal applicability). Nothing is added to any representation thought by *me* but the identity of consciousness in respect of all the manifold. Yet, this, according to Kant, is all that is needed for universal representation: any representation of which *I* am conscious, by this mere fact alone, participates in the form of my identity, and becomes itself a consciousness (representable as) standing in relation to, and so *common* to, every possible manifold

apprehended in empirical consciousness. The *universal* relation of all the manifold to a single I think gives each and every intuition, simply in being apprehended by *me*, a potential application to the manifold not merely of each empirical consciousness I have had or will ever have, but to every one I could *possibly* have, and does so prior to and independently of psychological conditions like Humean custom and associative propensities:

the individual apprehension must be determined by the universal. The universal is the relation (*Verhältnis*) to the rest and to the whole of the state... The unity of the mind is the condition of thought and the subordination of every particular under the universal, the condition of the possibility of associating (*zugesellen*) a given representation to another through an act. (AA 18, §5203)

The I think, as analytic unity of apperception, supplants Hume's ersatz universality of associative habitudes with universals possessing a range of literally infinite scope (pure intuition), thus restoring to the mind the a priori universality intrinsic to logic and mathematics from the prison of language in which Hume had sought to confine it.

The universal scope any representation acquires in being thought by me does not, of course, mean that it actually is common to every possible apprehended manifold, and indeed it could very well turn out to be true of none. Nevertheless, by the very fact that I think it, it necessarily acquires a *potential* application to everything capable of being apprehended in consciousness, and so may be combined in judgment with any other, even if falsely. It is the *possibility* of true judgments that Kant claims to be secured in this way, not their actual (or, a fortiori, necessary) truth. For the I think, thanks to its ground in a priori synthetic unity, effectively defines a domain consisting of the manifold of every *possible* empirical apprehension, so that any representation at all, simply by being thought by me, ipso facto ranges over that domain, and so has a potentially infinite application. For no representation is in and of itself a universal; universality is not a feature internal to a representation, nor something bestowed upon it through such psychological processes as abstraction (as with Locke and Berkeley). A representation becomes a universal only in and through its (possible) use in judgment, that is, the possibility of being thought by an I, where T, the judging subject, signifies an analytic unity of apperception defined by the act of judging itself (the logical functions as definitive of understanding: das Vermögen zu urteilen; see A69/B94 and AA 9 §1). This is why Kant saw fit to describe the I think as "the copula for a possible judgment and not yet a judgment itself, as [something] for which a predicate is required" (AA 22, p. 89; cf. B141-2). Accordingly, any representation accompanied by pure self-consciousness ipso facto acquires the logical significance of a predicate affirmable or deniable of every other, while, conversely, each and every possible appearance (insofar as it is subject to conditions for synthetic unity of apperception) is, potentially at least, a predicate:

The proposition *I think*, taken problematically, contains the form of every intellectual judgment in general and accompanies all categories as their vehicle (A348/B406) [It] was not classified in the general list of transcendental concepts but nevertheless must be counted among them... One sees easily ... that it is the vehicle of all concepts in general, thence also of transcendental concepts, and thus that it is always conceived along with these too and is just as

transcendental as they. But it can have no particular title [i.e. specificity] because it serves to present all thinking as belonging to consciousness. (A341/B399)

Were the representation of apperception, the I, a concept whereby anything might be thought, then it would also be able to be used as a predicate of other things, or contain such a predicate within it. But it is nothing more than a feeling of an existence without the least concept and only a representation of that to which all thinking stands in relation (*relatione accidentis*). (*PFM* §46n., p. 334)³

The I think is at once real ("a feeling of an existence") and logical (the copula, the form of predication). It is real in much the same sense the pure forms of intuition are real: like them, it is utterly uniform, featureless, and, as imperceptible (because pure), devoid of existence, quality (reality), and relation in the field of appearance. Yet, whereas pure space and time exist only in and for intuition (sensibility) but, as unthinkable, are quite literally beyond the ken of all conception and judgment, the I think, as non-manifold, and so unintuitable, exists only in and for thought in general; that is, its reality is the reality of act of thinking itself (judgment).⁴ The relation of the I think to appearances is, nevertheless, exactly analogous to that of pure space and time. For just as it is impossible to apprehend the data of sense in relations of juxtaposition or succession except through the pure, formal intuition of space and time, it is no less impossible to arrive at concepts through these data otherwise than via a prior, merely logical consciousness of oneself as embodying the form of a conceptus communis. The I think is not the outcome but the presupposition of analysis (= concept acquisition via comparison/reflection/abstraction); it is a universal like no other, its relation to individuals unique because inverted. This consciousness is what must be added to intuited representations to transform them into fodder for analysis in the first place.⁵ The I think is thus the form of thought in much the same sense that space and time are forms of intuition: a form that precedes and makes possible the matter of conception, just as space and time precede and make possible the matter of perception (see esp. A267-8/B323-4).

³By explicating the copula through the I think, Kant has in effect excluded the copula from the content of a proposition, and thereby anticipated the function/object analysis of Frege (who buried the copula in the predicate). For the I think is completely devoid of content, neither intuitable nor conceivable; it contributes nothing but the formal relation of universality (i.e. universal scope) to the representations it thinks. One difference between Kant and Frege is that, for the latter, the act of judging is essentially a matter of assertion, external to the judgment proper, whereas, for Kant, the two are inseparable (assertion, for Kant, is a modality of judgment, and every judgment has a modality). Another difference, one worthy of sustained examination, is that, from a Kantian perspective, Frege went too far in stressing the difference between identity and the copula of predication: for Kant, the identity of the I think and its status as form of predication are, from a transcendental philosophical perspective (but *only* therefrom), one and the same.

⁴See esp. B157-8n., A346/B404, A362, A402, B422 + n., and B429.

⁵The identity of the I think is exactly that which would be possessed by a constituent character (*Merkmal* — see B133n.) contained in every possible concept simply as such. Since it lacks all content, it is of course not actually such a mark (see AA 9, p. 58), and must be conceived quite differently than any genuine mark; for only that may enter into the content of a concept which is the *outcome* of processes of analysis, and this is no less true of marks as empty and indeterminate as being in general than of marks as concrete as red in general.

§17: The Principle (*Grundsatz*) of SUA is the Highest Principle (*Prinzip*) of the Employment of the Understanding

Kant opens with a restatement of his two basis principles, one of transcendental aesthetic — that all the manifold of intuition should be subject to the formal conditions of space and time — and the other of logic (both general and transcendental) — that all the manifold of intuition should be subject to conditions of the original synthetic unity of apperception.

In typical Kantian fashion, he then inserts a footnote that seems to assert that the two are in essence in the same: that space and time are original synthetic unities of the manifold: "Space and time, and all their parts, are intuitions, and are thus, with their manifold, singular representations (see the Transcendental Aesthetic); not mere concepts, through which the very same consciousness is contained in many representations, but, on the contrary, they contain many representations in one, and in the consciousness of that representation, hence as a composite. Consequently, the unity of that consciousness met with in them is synthetic and yet also original. Their individuality is important in application (see §25)." The impression that the pure space and time of the transcendental aesthetic are the very same as the original synthetic unity of the manifold on which Kant founded the possibility of the understanding is confirmed by other passages later in the B Deduction, e.g. "The pure form of intuition in time, merely as intuition in general which contains a given manifold, stands under the original unity of consciousness simply through the necessary relation of the manifold to one I think." (B140; see also B160 + n.) To be more precise, pure space and time are not identical with, but rather instances of, original synthetic unity of apperception; there is, in addition, the synthetic unity produced by applying the categories to ordinary judgments, which gives appearances determinate existence in space and time and at the same time gives objective reality to the pure space and time within the field of perceptible appearance: this synthetic unity is called *nature*, the cosmos, the dynamical nexus of physical and psychical being.

But that is to get ahead. Here Kant's principal order of business is to elaborate a new characterization of the understanding based on what he established in §16, namely, that unity of apperception is an essential condition for thought, and therefore for cognitive thought among others. He thus defines understanding as capacity for cognitions, but explains in such a way that it is constitutive not only of our thought of objects, but of the objects themselves we are capable of thinking: "Understanding is, speaking generally, the capacity for cognitions. These consist in the determinate relation of given representations to an object. Butan 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 their synthesis. Consequently, the unity of consciousness is that alone which constitutes the relation of representations to an object, hence their objective validity, and consequently their becoming cognitions; upon it, therefore, the possibility of the understanding itself rests."

This characterization of an object actually falls out of the recognition of the need for synthetic unity if analytic unity is to be possible. Recall the characterization of an object in the A Deduction: an object is something distinct from our representations which prevents them "from being haphazard or arbitrary, and which determines them a priori in some definite fashion." (A104) But, according to Kant (just as for Hume before him), nothing is ever present to consciousness save our own representations; so whatever idea we can have of our representations relating to an object we cannot obtain from the object (which is never itself present to consciousness) but only from the necessary agreement of our representations with one another (their affinity), or, as he

characterizes it in the 2nd Analogy: "appearance ... can only be represented as an object distinct from them only if it stands under a rule which distinguishes it from every other apprehension and necessitates some one particular mode of connection of the manifold. The object is that in the appearance which contains the condition of this necessary rule of apprehension." (A191/B236) Kant's claim in §17 is that this something distinct from the synthesized (apprehended) manifold is the none other than the unity which, when added to synthesis of the manifold in apprehension, results in combination. An object is distinct from the apprehended manifold and yet still internal to representation (i.e. present to consciousness) only if it identical with the unity added by understanding, by spontaneity, to the synthesized manifold of apprehension. Now this unity is not something in the manifold, or indeed in its synthesis; it is simply the qualitative unity of the synthesis, that which is common to the entire synthetic procedure; in other words, the unity that constitutes an object distinct from our representations is nothing other than a bare universal, a common representation, a predicate-concept. Hence, the definition of an object as that in the concept of which the manifold (i.e. the synthesized/apprehended manifold) is united: it is only insofar as the concept determines the synthesis as a governing rule, or law, that the resulting image has the unity of an object with a being of its own over and above the representations of which its manifold appearance consists. Thus, it is not just that a concept is require to bring the object to consciousness; rather, the concept is constitutive of the object as an object (as something distinct from our representations). This is a non-psychological version of what Hume tried to do in *Treatise I/iv/§2*, with his account of continued, distinct existents.

Now that we have recognized that concepts are actually constitutive of objects, we can see that apperception, as that in virtue of which concepts are possible, must, for the very same reason, be that which makes possible objects of cognition. Thus, "The first pure cognition of understanding, upon which all the rest of its employment is based, and which also at the same time is completely independent of all conditions of sensible intuition, is the principle of the original *synthetic* unity of apperception."

Kant concludes §17 by remarking that the principle of unity of apperception should not be taken to apply to any understanding as such, but only to one whose apperception is empty, contentless. For an understanding that, by its mere apperception, could furnish itself with a manifold, would not presuppose a manifold given independently of its act, and therefore would presuppose neither receptivity nor a faculty for the synthesis of the manifold (imagination). So the absolute key to everything is the thesis, demonstrated negatively in the Aesthetic, and given a positive characterization in the Metaphysical Deduction, that "human understanding ... merely thinks, does not intuit" (B139) only for such an understanding is an act of synthesis necessary, and therefore conditions for synthetic unity (which turn out to be logical functions, and so the categories).

§18: What the Objective Unity of Self-consciousness is

In §17, the unity of apperception earned for itself the titles 'transcendental' and 'objective', since it proved itself to be a condition not only for thought of objects, but even for the objects themselves; this means that a knowledge of it is an a priori knowledge of objects, and therefore a transcendental knowledge. §18 focuses on the status of the unity of apperception as an objective, as distinct from a subjective, unity. The difference

Kant has in mind is best captured here by distinguishing the unity of combination *in* time, and therefore premised on time, and the unity of time itself, to which all such combinations in time conform. The empirical subject (subjective apperception) is a combination of the manifold in time; that is, it is an object of inner sense, a temporally determinate existence (the same enduring identity that Hume analyzed in his chapter on personal identity). As such, the subjective unity of apperception conforms to the unity of time as outlined in the Trans. Aes.: everything that exists in time is preceded and made possible by the one unique time; everything in time exists only through limitation and determination of this prior time, and so has its existence defined entirely in terms of relations of succession or simultaneity in respect of everything else, actual or possible, in time. In short, the subjective unity of apperception is a unity based on the unity of pure time.

The objective unity of apperception, far from being a unity based on pure time, is, on the contrary, the basis of the unity of pure time itself. It is what first makes possible the unitary pure time of the Trans. Aes., or, as foreshadowed in the footnote at B136 in §17, time is an original synthetic unity: "the pure form of intuition in time, merely as intuition in general which contains a given manifold stands under the original unity of consciousness by means sheerly of the necessary relation of the manifold of intuition to one *I think*; thus through the pure synthesis of the understanding which underlies the empirical a priori." (B140) The objective unity of apperception is utterly distinct from the subjective unity. The latter is just the unity of one object of the infinitely many possible in pure time, one which can only be given empirically, under quite specific circumstances and subject to the sort of psychological conditions of which Hume made; it thus is not objective, not a basis of objective unity in other things, but merely a source of subjective, associative connections: "To one one, for instance, a certain word suggests on thing, to another some other thing; the unity of consciousness in that which is empirical is not, as regards what is given, necessary and universally valid." A claim to necessary and universal validity can, by contrast, be made for the objective unity of apperception, since it is the a priori, transcendental basis of all synthetic unity of the manifold, including that of pure time and space. And this prepares the ground for the crucial step in the B Deduction...

§19: The logical form of all judgments consists in the objective unity of the apperception of the concepts contained therein

This section in which we get "the precisely determined definition of a judgment in general," which Kant deemed of sufficient importance to clarifying the Transcendental Deduction to his reader to merit a complete revision. He opens by taking logicians to task for their faulty definition of judgment as the relation of two concepts. The fault Kant finds with it, however, is not at all what a contemporary philosopher would criticize. Today, there is an insistence that a judgment is fundamentally a relation, most commonly not between concepts but between individual objects, relations which moreover can involve more than two terms ("George is surrounded by Mary, Steve, Bill, and Jane" is a relation involving five terms, each of which designates a thing, not a concept). But the fault Kant had in mind is simply this: there are some judgments than conjoin not two concepts, but two judgments: e.g. the cases of hypothetical and disjunctive judgments, which, contrary to some logicians, Kant did not believe were reducible to categorical

judgments. Kant never wavered from the dominant conception of his time (when the theory of ideas reigned supreme in philosophy), that a judgments are relations of universals, and that individuals never directly enter into judgments. Individual representations may be perceived, remembered, associated, and otherwise related in imagination; but this is not yet judgment, which is a relation strictly between concepts, between what Kant would deem the unity, or rule, on the basis of which synthesis in imagination must proceed insofar as it is to be objective and expressible in language. (Thus the need to distinguish "the relation of the given cognitions in any judgment" from "the relation according to laws of the reproductive imagination, which has only subjective validity," B141.)

Keeping this context in mind, we can understand Kant's principal claim in §19: "a judgment is nothing but the manner in which given cognitions are brought to the objective unity of apperception. This is what is intended by the verb of relation 'is'. It is employed to distinguish the objective unity of given representations from the subjective. It indicates their relation to original apperception and its necessary unity. It holds good even if the the judgment is itself empirical, and therefore contingent, as, for example, the judgment, 'Bodies are heavy.' With this I do not mean to say that these representations belong to one another necessarily in empirical intuition, but that they belong together by virtue of the necessary unity of apperception in the synthesis of the intuitions, i.e. according to principles (Prinzipien) of the objective determination of all representations insofar as cognition can arise from them — principles which are derived from the principle (Grundsatz) of the transcendental unity of apperception. In this way alone does there arise from this relation a judgment, i.e. a relation which is objectively valid and is adequately distinguished from a relation of the very same representations in which there is merely subjective validity, e.g. according to laws of association. In the latter case, I could only say: if I carry a body, then I feel a pressure of its weight; but not: it, the body, is heavy. This is just to say that both of these representations are combined in the object, i.e. without distinguishing the state of the subject, and are not merely concomitant (beisammen) in perception (be their conjunction ever so constant)." The business of judgment is to bring concepts to the unity of apperception and thereby give them the relation to an object definitive of cognition. To bring the representations included in a judgment to apperception means to bestow on them the unity of an object, and therefore of something distinct (external and independent) of the manifold appearances of which it is comprised. We determine an object in the sense of constituting it as an object (distinct from our representations), with each and every act of judgment, insofar as that judgment brings its constituent representations to the unity of apperception.

As Kant makes clearer in the *PFM*, this is not the case with every brand of judgment. There he distinguish judgments of perceptions, which merely give an intellectual veneer to what are essentially the verdicts of associative imagination, from judgments of experience, which are the sort Kant has in mind here: those which order the representations of which the judgment consists in conformity with the objective unity of apperception — the same objective unity which is the basis of the unity of objective time and space, and therefore of all object in them. Each such judgment in effect gives determinate existence to a particular set of perception with relation to the a priori unity of all the manifold in space and time: we say it *is* so and so, and thereby distinguish an object which necessitates that our representations be so and not otherwise.

These elements of his conception Kant will develop at leisure later on, esp. in the Analytic of Principles. Here, however, is concern is to establish that judgments — some not all as it happens — is the means whereby otherwise subjective verdicts of

associative imagination can be transformed into genuine object-constituting syntheses. For if this is accepted, what then follows? Since the objective unity of apperception is strictly intellectual and a priori, the only element of a judgment that can actually be performing the role of bringing representations to this unity is purely intellectual, a priori part; and this, as the Met. Ded. shows, is none other than the logical functions of judgment. Thus we arrive at the key section in the Deduction — while not completing the Trans. Deduction of the Categories, it makes the remainder comparatively easy...

§20: All sensible intuitions stand under the categories as conditions under which alone their manifold can come together in one consciousness

"The manifold given in a sensible intuition necessarily belongs under the original synthetic unity of apperception, because through this alone is unity of intuition possible (§17). But that action of the understanding through which the manifold of given representations (be it either intuitions or concepts) is brought under one apperception in general is the logical function of judgments (§19). Hence, all the manifold, insofar as it is given in one (Einer) empirical intuition, is determined in respect of one of the logical functions of judgment, through which it is brought to one consciousness in general. Now the categories are nothing other than these very functions of judging insofar as the manifold of a given intuition is determined in respect of it (§13). Thus the manifold in a given intuition necessarily stands under the categories." See B128...

What still is left undone? Why is the Deduction as yet incomplete? All we have shown so far is that the categories must determine our judgments if those judgments are to be objective, that is, actually constitute an object. But it is as yet a mystery how sensibility lends itself to this determination: the heterogeneity problem still remains. Thus, Kant needs to show in more detail how the understanding can, via the mediation of imagination, determine sensibility in accordance with ordinary concepts, and by their means, in accordance with the categories. Or, alternatively, make clear how it is that the categories can be the basis of actual synthetic a priori judgments regarding the appearances of our senses.

In order for the manifold all to be given in one intuition, Kant says, it must be determined in respect of one of the logical functions as the means whereby alone unity of apperception is possible. The formula — in order for the manifold all to be given in one intuition — seems strange because is this not the case quite independently of judgment, simply insofar as the manifold is given in one space and one time? Yes ... and no. For space and time themselves are synthetic unities. But they are pure; so, one has again to remember that appearances, which are perceived empirically, cannot be given in space and time, since space and time are pure and therefore imperceptible; what is perceived is not perceived as in unitary, unique space and time, and so has to be put there by means of another kind of synthesis altogether, that of judgment. Judgment, specifically logical functions of judgment, having been construed in §19 as the means whereby alone synthetic unity of the manifold is possible, turn out to be the sole means whereby appearances can become a synthetic unity, that is, all stand together in one intuition, one space and time, one apperception, one unity of consciousness. All these are in fact the same, though here Kant does not distinguish them because his account is presently at a higher level of generality than space and time (which refer to objects specifically of our kind of sensibility, not the objects of any sensibly conditioned whatever, howsoever constituted).

Since the category is nothing other than the logical function in the capacity not of ground of analysis (the genesis of concepts) but of unity-giver to intuition, this is just to say that all the manifold of intuition must stand under the categories if unity of apperception is to be possible. Why no QED? Again, we have yet to learn precisely *how* (the mechanism by which) the categories apply to the objects of our kind of intuition, space and time, in such a way that we can understand the a priori grounds of the possibility of the sciences of mathematics and physics (which are known only to beings with our particular forms of intuition).