The First Analogy

and the Principle of All the Analogies

The mathematical principles have described two conditions of intuition, conditions that concerned the principle that makes possible the Axioms of Intuition and the conditions of anticipation of the matter of intuition. We are turning now to the dynamical principles, of which there are two sorts, the Analogies of Experience and the Postulates of Empirical Thought. Of the two forms of dynamical principle, the Analogies are the ones that are given much the greater consideration by Kant, not least because he discusses and defends a general principle of all the analogies in addition to principles of three distinct and separate analogies. The general principle of all the analogies is stated slightly differently in the two editions of the Critique. In the first edition it is states as: “All appearances are, as regards their existence, subject a priori to rules determining their relation to one another in one time” (A176-7). This formula shows that the general principle underlying all the analogies is a universal one. The universal principle touches on the existence of appearances showing that this existence requires determination by a priori rules of a temporal nature. By contrast, the formula in the second edition states: “Experience is possible only through the representation of a necessary connection of perceptions” (B218). The second edition formula shifts the discussion from appearances to experience and states the condition of possibility of experience, describing this condition as a necessary one (rather than the universality of
the first edition which involves a different criteria of the a priori). The necessary condition in question refers us back also to the previous principle, the Anticipations of Perception, as it refers to perceptions showing the need for perceptions to be connected (as we saw in the demonstration of that principle). There are advantages and disadvantages to both versions as the advantage of the first edition formula is the reference to time, a reference missing from the second edition formula but the second edition’s stress on necessary connection of perceptions demonstrates more clearly the continuity of this principle with the mathematical ones.

After stating the formula of the general principle of the analogies Kant goes on to give a proof of this which begins by describing experience as “a knowledge which determines an object through perceptions” (B218). In a fundamental sense it will be the point of the Analogies to show that this is what experience does indeed consist in. The perceptions in question will be synthetically combined and the unity of them will be essential to knowledge of objects. This will be K-experience but Kant goes on to use a different sense of “experience” (L-experience) when he refers to perceptions coming together in experience only in accidental order by which he means that within the ingredients of the particular perceptions there appears to be nothing that requires them to necessarily relate to each other. The relation of them to each other is indicated to have something to do with temporal ordering but it is also intimated that the reason for the need for categories has something to do with the fact that temporal perception does not include a perception of time itself.
Three modes of time are listed and these modes are what are specifically attended to in the three analogies: duration, succession and co-existence, each of which requires a rule but the general principle of all three analogies rests on the necessary unity of apperception. As Kant puts it: “All this manifold must, as regards its time-relations, be united in the original apperception” (B220). From this it follows that all empirical time-determinations must stand under rules of universal time-determination and that the analogies must be these rules.

As dynamical principles the Analogies concern the existence of appearances and their relation to one another and the emphasis on relation is particularly important here since we are schematizing the categories of relation at this point. The mathematical principles were concerned with the possibilities of intuition in general but the dynamical ones are rather concerned with the a priori rules of existence of appearances. The general consideration here is concerns perceptions with Kant indicating that if a perception is given in a temporal connection with another perception then, even without knowing what the latter perception is concerned with, we can still assert conditions of this temporal connection. This is in accord with the specific use of analogies in philosophy as Kant understands this:

“in philosophy the analogy is not the equality of two quantitative but of two qualitative relations; and from three given members we can obtain a priori knowledge only of the relation to a fourth, not of the fourth member itself. The relation yields, however, a rule for seeking the fourth member in experience, and a mark whereby it can be detected. An analogy of experience is, therefore, only a rule according to which a unity of experience may arise from perception. It does not tell us how mere perception or empirical intuition in general itself comes about. It is not a
principle constitutive of the objects, that is, of the appearances, but only regulative.” (A179-80)

The analogy that is at work in the principles is between the elements of appearances and the logical unity of concepts, a link made possible by the schema. The First Analogy schematizes the category of substance. The first edition formula is stated as follows: “All appearances contain the permanent (substance) as the object itself, and the transitory as its mere determination that is, as a way in which the object exists” (A182). This formula states a universal condition of appearances indicating that substance is thought of as that which is permanent whilst that which changes is only a determination of it. The second edition formula appears to be different since here Kant states: “In all change of appearances substance is permanent; its quantum in nature is neither increased nor diminished” (B224). The second edition formula restates the same point as the first in its first part, stating again the universal condition of appearances as involving reference to the permanence of substance. The second edition formula adds to this a conservation principle when it adds the second element that in nature the quantum of substance remains constant. This conservation principle is a corollary of the general claim concerning substance and whilst it appears different from the first edition it perhaps is only intended to draw a consequence that was missing from the first edition formula.

The proof of the principle of the First Analogy opens in the second edition with a reminder of the point established in the Transcendental Deduction that all appearances are in time and that in it alone can
simultaneity or succession be represented. Time itself is then referred to as if it were itself a substance when Kant refers to it as a substratum in which all change has to be thought. The next point of the argument is to remind us that time itself cannot be perceived. Since it cannot it follows that there must be something in perception itself which represents or stands in for time in general and is the means by which change can be perceived. This substratum is however, as already implied, substance itself, which, as the substrate of all change, must remain the same and thus its quantity in nature can neither be increased or diminished. (Here we see the way in which the conservation principle is revealed to be a corollary of the general principle of permanence.) This first paragraph gives us some considerations for connecting time and substance together but surely does no more than that.

Kant proceeds next to an investigation of our apprehension of the manifold of appearances, an apprehension which is successive and thus involves change. Since this is so attention to apprehension alone will not be sufficient for us to determine what is successive and distinguish it from what is simultaneous. We will need something else that serves as an underlying ground in order to make this distinction. This is why Kant suggests that permanence expresses time in general as time itself as the basis of change cannot itself change and that which cannot change must be the permanent. “Only through the permanent does existence in different parts of the time-series acquire a magnitude which can be entitled duration.” (A183/B226) So, for it to be possible for measurement of temporal intervals to take place we require a sense of that which is permanent but since time
itself cannot be perceived there must be something permanent that is the substratum of its determinations.

In addition to these considerations Kant refers to the way the common understanding has also tended to assume that appearances require a substratum, a point that further underlies the claim that nothing arises from nothing. That which fundamentally exists must be constant as otherwise there would be nothing to prevent a rupture in the coherence of experience as if new substances could come to exist there would have to be a distinction between the time prior to their existence and that after it, times that would however have nothing in common with each other.

The determinations of a substance are what we term accidents and what these accidents are, in experience, are alterations. “Alteration is a way of existing which follows upon another way of existing of the same object. All that alters persists, and only its state changes.” (A187/B230) The perception of alteration thus points to the existence of substances. That which is permanent is what allows transition from one state to another and this again ensures that there can be no empty time. So permanence is a necessary condition under which appearances are determinable as things or objects of possible experience.

What follows from this argument then are that we have reason to assume that there are permanent substances underlying the time-strata and we can analogously assume something concerning their relations to each other and to the appearances but not anything concerning their nature as that fundamentally is unknown to us. So phenomenal substances are what are the
grounds of possibility of the utilisation of temporal notions as they provide us with the sense of permanence necessary for the conception of duration but the fundamental character of them must itself remain further unknown as we can work only here by analogy, we cannot constitute the nature of the things in question as we could the conditions of intuition. This is what is meant by describing the principle concerning substance as \textit{regulative} only.