KANT AND CONTEMPORARY EPISTEMOLOGY

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GERD BUCHDAHL

SCIENCE AND GOD: THE TOPOLOGY OF THE KANTIAN WORLD

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Kant is known as the great mediator between opposing scientific and philosophical systems; for instance, between the Cartesians and the Leibnizians in respect of the competing notions of momentum and energy; or again, between the empiricist and rationalist tradition of the seventeenth and eighteenth centuries. In a very similar way we find Kant attempting to mediate between sceptical and religious positions. On the one hand, he seeks to show that the traditional arguments for the existence of God, the ontological, cosmological and physico-theological proofs, cannot be sustained. Yet, on the other hand, we find him simultaneously defending the language and accompanying convictions of religious consciousness. Nor is this a purely 'linguistic' matter, as the reference to language might suggest. On the contrary, the imagery of a God whose purposes work themselves out in the context of the order of nature as well as of morality is for Kant an essential element through which reality is to be defined, emerging under the sovereign command of reason.

However, to make such a position 'stick', an entirely new approach to the account to be given of reality — human as well as divine — had to be constructed. New 'ontological dimensions' (if we may use this term) had to be devised, both for the conceptions of the physical universe, including man as an empirical subject, and for the domain, not only of moral consciousness but also of the 'divine understanding'.

This notion of 'new ontological dimensions' lies at the very centre of the revolution in philosophy which Kant sought to bring about. It is a putative achievement which especially in respect of the religious side of Kant's ideas has not received its due appreciation to this day; for which reason we shall make it the focus of the remarks that follow.

Kant's new approach is well-instantiated in a remark concerning

the dimension of the 'divine' in one of his Reflexionen (No. 6286; Ak. ed., XVIII, 554-5) where he alludes to the centrality of the concept of "reduction". Kant argues there that before we can move on to the dimension of the divine, and in order to free the latter from certain "anthropomorphisms", "reality has first to be freed via reduction from that which belongs to it qua phenomenon"; by which he means, as he describes it in this passage, "the suspension of everything sensitive"; that is to say, the suspension of all those conditions that define empirical, human, reality; such as the conditions associated with sensibility, for instance, and which determine space and time. By means of such a 'reduction', Kant contends in the Reflexionen passage, the concept of God is moved into an entirely fresh 'dimension'; only when this is done are we entitled to formulate the concept of the divine "on analogy with" certain "human characteristics". The deeper significance of this last point will become clearer as we proceed.

Returning to the notion of the 'conditions of empirical reality', or more generally of 'non-logical' reality, it is of course this concept of 'condition' which is central to the development of Kant's whole philosophical approach. For it implies that in order for anything 'to get off the ground' at all, i.e. to acquire some ontological significance or other, certain conditions - more recently also generalized as 'contextual conditions' - have to be introduced and proved to be satisfied before we are entitled to enter into the study of some corresponding intellectual discipline, be this a science, an anthropological study, an account of the possibility of mutual understanding, or what have you. Of late there has been a fairly heated debate, partly sparked off by the work of Richard Rorty (cf. his Philosophy and the Mirror of Nature), as to whether such a position is desirable. In particular, this has been contrasted with a pragmatist-naturalist position according to which the whole conception of 'conditions' is flawed; instead, so it is argued, we ought 'just to accept what comes', to adapt one of the Rortyan slogans; especially since, so it is argued, any such conditions can too easily acquire a quasi-authoritarian status, leaving insufficient room for free enquiry.

I shall not here seek to adjudicate between these competing philosophical positions. Perhaps it is enough to say that if people do in fact invoke certain concepts and principles that appear to have a relatively permanent presuppositional status within their discursive prac-

tice, it is as well to bring these out into the open, and so make us conscious of their existence. Just as the evolution of science has had as its prime aim to make visible the basic theoretical principles that underlie and animate 'the phenomena', thus making it possible for us to 'find our way around' them, so it may be equally necessary to make ourselves aware of (for instance) the basic regulative principles that are involved in the construction of these theories themselves, and for much the same reason. At any rate, Kant is probably the first and greatest example to have awakened our philosophical consciousness to the significance of a 'conditions' philosophy.

Given the complexity and subtleness of the Kantian argument in general, and its theological dimension in particular, I propose to make my account circle round certain figurative representations (Figures 1 and 2). Figure 1, it will be seen, represents specifically both the 'objective' and the 'subjective' factors of the Kantian universe, leading in a more natural way to Kant's structuring of his theological argument, as shown in Figure 2.

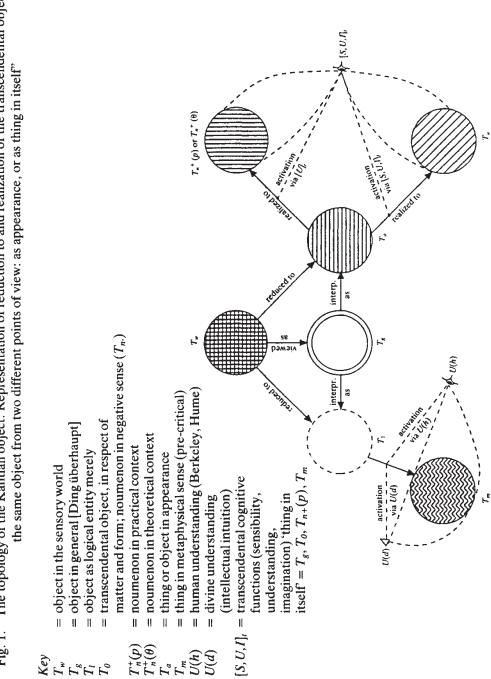
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We have noted that in the *Reflexionen* passage Kant maintains that in order to place the concept of God in a dimension that frees it from crude anthropomorphisms — the old imagery associated with the figure of God on earth as well as in heaven — we have to effect a "reduction".

Let me briefly outline the basic elements of this method of reduction and consider some of its main results, including a few of the more specifically theological aspects of Kant's teaching.

In Figure 1, we start with the world of common-sense concerns (T_w) . Following on from there, we will distinguish between what I will term the 'phenomenology' and the 'ontology' of this world, the former being the account of the actual world as given by common sense, but especially by science in all its aspects, observational-experimental as well as theoretical. By contrast, 'ontology', in its most general sense, is concerned with the 'possibility of the being' of such a world. The classical problem, already posed in pre-Kantian philosophy, may then be formulated as follows: how can we account for the real possibility of what, on phenomenological grounds, is actually the case? The question, in these terms, was first posed by Leibniz who held that whilst infi-

Fig. 1. The topology of the Kantian object. Representation of reduction to and realization of the transcendental object "Viewing



nitely many worlds were logically possible, the 'real possibility' of the one which actually exists (phenomenologically speaking) presupposes a special sort of 'grounding'. According to Leibniz, this grounding is provided by God; in his formulation, there has to be a 'sufficient reason' for anything to be really possible, and thus to be actualizable, this reason being ultimately founded in God (cf. *Monadology*, sect. 38).²

Let us now briefly describe this again in terms of our own formulation of such a position.³ Reverting to Figure 1, we imagine ourselves as starting with our real, everyday world, represented in our diagram by T_w ; the world towards which — in Husserlian terms — we take up a "natural attitude", by way of some phenomenological account or other — ' ϕ -account' for short.⁴ Next, we abstract from (or 'bracket') the ϕ -level aspects of the case, confining ourselves to the ontological or 'o-level' aspects alone. Here again we begin with a piece of abstraction: we imagine ourselves considering objects in abstraction from any o-level account as such, taking towards it a philosophically 'neutral' stance, tantamount to viewing the world purely as what Kant calls an "object in general [Gegenstand überhaupt]" (T_g in our figure).

Next we pass to the stage of 'reduction'. We specify T_g further, by imagining the object explicitly to lack (or at least: as yet to lack) any ontological constitution, no enabling conditions being supplied that might generate such a constitution. Using the Husserlian locution, we describe this by saying that the ontology of the object, or the object for short, has been reduced to a state, or status, of 'ontological nullity', of an ontology with zero-value.

There are, as we saw earlier, two types of characterization of the object resulting from reduction, represented as T_i and T_o in Figure 1. The first of these corresponds to the Leibnizian view, also held by the early pre-critical Kant. Reduction here results in the object regarded as a purely 'logical' entity, the T_i of our diagram. In order to advance from this to next stage — in our figure, from T_i to T_m — yielding the real possibility of an object, we must, according to Leibniz and the pre-critical Kant, posit a God, a 'divine understanding', whose mediation or 'activating power' will provide the 'ground' for the real possibility of things (substances, Leibniz's 'monads', for instance), as well as — according to the early Kant, though not to Leibniz — the relations between these substances. (The details of the Kantian account can be found in his *Nova Dilucidatio* of 1755.) With this reading, T_m then represents what we have called the 'realization' of T_i

as T_m ; the latter having the status of objects under the pre-critical interpretation, involving what we may call a metaphysical version of the realizational process, T_m being one of the several candidates later described by Kant as a 'thing in itself'.

This particular reduction-realization account (the account of the 'rationalist' schools of the seventeenth and eighteenth centuries) invokes, as just noted, specific reference to the divine understanding. The 'metaphysical' type of realization extends however also to the empiricist account, to be found in Berkeley and Hume, except that there it involves 'activation' of T_i via the human (and not the divine) understanding, and where the latter is viewed as a kind of 'psychical or mental agency', responsible for the existence of any object (cf. for instance, Berkeley's "esse = percipi").

So much for the left-hand side of Figure 1. By contrast, the righthand side represents Kant's "critical" position, associated with a 'critical' or 'transcendental realization' process, contrasted with the earlier "dogmatic" (as Kant calls it) or metaphysical position. The 'critical' version of ontology involves three sorts of changes. (1) 'Reduction' is now viewed as a process leading from T_{w} to T_{θ} rather than T_{θ} , to the object in a "transcendental" (T_o or 'idling') rather than purely 'logical' sense; the important difference between T_i and T_0 being that it involves reference to a 'material' factor, Kant's "transcendental matter" $(T_o(m))$. This change at once also leads to another: (2) 'Critical' ontology, as far as this relates to what Kant calls "theoretical" concerns - especially those of "theoretical reason", the field of empirical and scientific knowledge (as distinct from 'moral action', and the corresponding "practical reason") – confines itself to giving an account of the possibility, not of the *object*, simpliciter, but only of its cognition, and of experience in general, whose domain it forms. (3) Associated with (2) goes a change in the type of activating agencies (and their status) involved in realization. In this new version it is only the human understanding, in addition to human sensibility, that constitutes the framework whose activation yields certain "modes of sensibility" (space and time), and certain 'schemata' of the human understanding (the [S,U,I] of Figure 1). More importantly, these agencies, in so far as they are regarded as agencies of realization, no longer have a 'psychical' (empirical) status, but instead convert to something with 'transcendental' import, the corresponding 'empirical' version functioning now merely as a 'model' for the transcendental original.

Now the central point underlying this reduction-realization procedure (RRP) is as follows. No empirical meaning attaches to the concept of an existing world apart from the kind of 'critical' realizational process as just defined. There is no sense in speaking of a world simpliciter and unconditionally, or perhaps conditionally 'under God', with the latter viewed as an activating or foundational focus, as per the pre-critical position represented in the left-hand part of Figure 1.

This Kantian position may be characterized as one whereby we acquire a kind of philosophical 'autonomy' over the account of what (or how) the world 'is' - in any 'realist' sense of the term 'is' or 'being'. On the Kantian position, the ontology of nature is not something that we 'find' or 'discover', as though it had previously, as it were, 'pre-existed in itself'. Instead it has first to be 'made' or 'reconstructed' - 'realized', in my technical sense of this term - before it can come to function as an object of knowledge; the interpolated process of 'de-construction' or 'reduction' precisely expressing the unconditional necessity for a subsequent re-construction or realization. It follows that any so-called 'given' inner core of nature or reality – in abstraction from the realizational process – is nothing but a hollow shell, represented by the concept of the transcendental object $(T_a \text{ in our diagram})$, best viewed as an entity or stage essentially standing for the "problem" of achieving some subsequent realization. (cf. B310 for this use of "problem" in Kant.)6

The notion of an empirical world, as well as of any experience of such a world thus presupposes the injection of a conditional framework, subject to the requirement that the ontology thereby 'realized' should also reproduce the phenomenological account of this world. Thus, on lines of Kant's argument of the Second Analogy in *CPR*, the schematized concept of causality has to be injected so as to yield the notion of an empirical sequence of states, corresponding to the empirical meaning of this notion. In general, any of the conditioning or transcendental agencies through which we seek to model the world, and thus to frame a realizational account, thereby acquire what Kant calls "objective validity"; and this goes also for the theological version of such accounts, as will emerge in what follows. We arrive here, indeed, at the core of the Kantian position. For the whole purpose of Kant's constructive approach is, of course, to define the possibility of offering *alternative* realizational accounts; in Kant's own

case, to make it possible to view or interpret the world from "two different points of view" (Bxviiin). One of these interprets the world, including our empirical selves, as the result of the joint activation of sensibility, understanding and imagination. The second alternative involves a realization of T_0 via the understanding alone, invoking not 'thought joined to sense' but 'thought' alone, yielding a purely 'noumenal' result; the particular concept of the understanding singled out by Kant being causality, so as to yield a sense for the notion of a "causality of freedom", and of man in a purely moral context.

The 'two alternatives' approach is specifically applied by Kant in the Third Antinomy, in terms which incidentally come as close as could be desired to the details of our 'realization of the transcendental object' story given above. Kant there argues that all things that belong to our world "must be grounded in a transcendental object [ein transzendentaler Gegenstand zugrunde liegen muß]". Hence nothing hinders us to "attach [beilegen] to this transcendental object, apart from the property through which it appears [causality determining appearance], also a causality which is not appearance" (A539/B567). In the particular case in hand, we thus arrive at two interpretations of 'the subject'; one, with an "empirical character", subject to "the laws of nature", another, with an "intelligible character... not standing under any conditions of sensibility, and not itself appearance", the subject of moral action. And Kant concludes that "we might entitle the former the character of the thing in the appearance, and the latter its character as thing in itself' (ibid.; obviously a second use of this term, in addition to the one noted before, where it had been interpreted as the result of a 'metaphysical realization', T_m).

Reverting to Figure 1, these are obviously the two realizations of T_o indicated there as T_a and T_n , the latter in this context (moral action) receiving a "positive" interpretation, as "noumenon in the positive sense" (B308; cf. CPrR (Ak. ed., V, 43)).8 Men had always imagined a realm of moral obligation, involving moral appraisals, acting from duty, and not from sensory motives alone. If this alternative realization yields the possibility of making sense of moral freedom, then this will thereby constitute also an alternative transcendental or 'critical' realization ("deduction", as Kant calls it) of a moral reality, one that is concerned with the agency of the categorial causal concept; providing a purely noetic, thought-like, or 'noumenal' context for the object, here, the individual moral subject.

The themes of 'realization' and of 'moral reality', implicit in the argument of the Third Antinomy, are developed in an equally explicit manner also in the Critique of Practical Reason. Thus in the Preface Kant remarks that whilst the CPR had interpreted the objects of experience, including even our own subject, "only as appearances, though based upon things in themselves" — obviously here to be understood as $T_0!$ — "practical reason itself now supplies reality to a supersensible object of the category of causality, viz. freedom", albeit "only as a practical concept and as such subject only to practical use" (loc. cit., p. 6).

Even more explicitly, in the section on the "Deduction of the Principles of Pure Practical Reason", Kant remarks that his whole approach had always been to "hold open a vacant place for speculative reason, i.e. the intelligible" — a reference to some attempted realization of T_a qua T_n . And he continues:

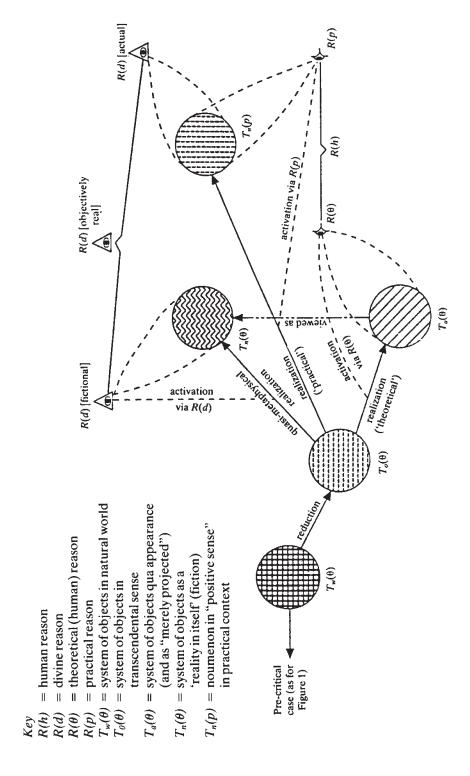
I was not able, however, to realize this thought [ich konnte diesen Gedanken nicht realisieren], i.e. convert it into the cognition even of the possibility of a being acting in this way. This vacant place is now filled by pure practical reason, through a definite law of causality in an intelligible world (causality through freedom), viz. the moral law. [In this way] the concept of freedom acquires here objective and, although merely practical, yet indubitable reality (loc. cit., p. 49, my italics).

Speaking generally then, the reduction-realization approach graphically expresses the fact that any imagery, required for constructing a conditional framework, with the function of yielding some given realization, will be able to claim 'objective validity' ('objective reality') with as much right as any other parts of the framework. In particular, it opens a way of construing theological arguments less in purely personal terms, as has often been the case in recent times, but instead addressing itself to an ontology that ranges over the whole domain of objective and subjective phenomena. This will become an important point in what follows.

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Having summarized Kant's general scheme, we are now in a position to appreciate the place and function assigned by him to the concept of the divine in relation to science, our main concern here being not so much with the details but with the overall architectonic of the

The topology of Kant's practical reason and theoretical reason (reflective judgement). Fig. 2.



scheme, partly because in the theological context the architectonic plays — even more than elsewhere — a major quasi-justificative part in Kant's argument. (This Kantian architectonic, in respect of its theological concerns, I have tried again to represent diagramatically, in Figure 2, to which we shall turn presently.)

Since 'real existence' for Kant invariably requires the activation of the conditions of sensibility, as well as of the other parts of the transcendental framework, his general scheme will plainly be incompatible with any of the traditional 'proofs' of God's existence, in the sense of existence involved here, which is really what Kant's various refutations of the standard arguments for God's existence amount to. However, such a result is not inconsistent with an attempt to find a place for God, or at least for a significant theological language, somewhere else in the system. Towards the end of the (Second) Introduction to CJ, sect. ix, there is an important passage which summarizes the various relations that exist between the empirical, the scientifico-theoretical and the moral parts of Kant's system. He writes:

The understanding, by virtue of the possibility of its a priori laws for nature, gives proof that nature is cognized by us only as appearance, whilst at the same time implying that it has a supersensible substratum, though it leaves this quite undetermined. [Reflective] judgement [or theoretical reason], by its a priori principle for the judging of nature according to its possible particular laws, makes the supersensible substratum... determinable by means of the intellectual capacity [for judging reflectively]. But [practical] reason, by its practical a priori law, determines it; and thus judgement makes possible the transition from the realm of the concept of nature to that of the concept of freedom. (Ak. ed., V, 196)¹⁰

The remainder of this chapter will attempt to unravel this summary of the relations between understanding, judgement (or theoretical reason) and practical reason. Speaking provisionally, the passage centres on the various interpretations of 'the substratum of things', related via three different contexts, (1) the substratum underlying the individual objects which when interpreted as 'appearance' obviously denotes T_0 ; (2) that which 'fictionally grounds' a system of such objects, as described for instance by some scientific theoretical scheme or other; (3) that which 'actually' mediates between, and thus serves as ground of the harmonization between nature as a system and man's own purposive moral actions. (In Figure 2, this is shown as the realization of $T_0(\theta)$, in relation to R(d)

(fictional) and R(d) (actual), respectively.)

Let us consider this in more detail. The "undetermined substratum" of the individual object is clearly a reference to the transcendental object (T_0) . However, since we are concerned primarily with the place of God in the general scheme, there may well be an allusion here to Kant's rationalist pre-critical teaching, where the 'substratum' would be interpreted as a purely logical entity (T_0) , whose realization, qua T_m (cf. Figure 1), is supposed to be effected via the action of the divine understanding which thus underlies it (as indicated in the left-hand portion of Figure 1). To the extent that pre-critical and critical notions sometimes get conflated in Kant's mind, for the sake of establishing certain symmetries between the different members of his system (presently to be explained), the reference to the 'undetermined' nature of the substratum may just imply that the concept of the divine understanding in the present context is 'unproven' and actually counterfactual.

We turn to the kind of substratum which in the passage cited above is said to be 'determinable'. This concerns what underlies a system of objects $(T_w(\theta))$, as described by some given scientific theoretical scheme, such as Newton's "System of the World" (see Figure 2). Kant describes such a system as a "unity", and it is a function of theoretical reason (or "reflective judgement", as CJ calls it) to effect such a unity of objects, analogous to the way in which the understanding effects a unity of perceptions so as to generate an individual object. (For this parallel, cf. A664/B692.) However, unlike the individual objects, a system of such objects has no existential, or in Kant's terms, no "constitutive" import: reason is capable only of "regulative" and not "constitutive employment". (In respect of the formal aspect of theories, Kant is thus evidently something of an 'instrumentalist'.)

The means by which reason achieves the construction of such scientific unities are certain 'maxims of judgement', e.g. simplicity, homogeneity, economy, etc., together with the usual formal apparatus involved in theory-construction. Now the term 'regulative' involves, as far as Kant is concerned, a reference to two rather different functions to be fulfilled by the methodological maxims, namely (1) their phenomenological function, for the purpose of constructing actual theories; (2) their ontological function, since Kant regards them not only as methodological but also as transcendental principles, i.e. as

conditions of the possibility of scientific systemicity as such. In other words, apart from the operations of 'theoretical reason' the notion of an order or unity of nature lacks any ontological foundation. We might perhaps 'hypostasise' such unities, says Kant (A692/B720), as something actually 'pre-given'; or alternatively, view them, with Newton, as creatures of a designing deity, existing unconditionally, which is to say, conditionally 'under God', as it were, and thus 'existing in themselves'. (For this characterization, cf. for instance A678/ B706.) But according to the whole scheme of the transcendental philosophy this is quite inadmissible, since it would at best yield only something 'hypothetical', "merely empirical", and not something that can be "presupposed a priori" (A693/B721). To make good the latter claim, what is required is something which, though making room for the spirit and imagery of, say, Newton's theological metaphysics, will represent not a metaphysical type but a 'critical' type of realization procedure.

It is here that the reduction-realization idea can be applied with particular effect. For as we have seen, to say that the world (in ontological respects) can acquire significance only as the result of some realization or other simultaneously means that apart from such a realization its ontology must always be taken as having only a zerovalue (the stage of 'reduction'). Reduction, as it were by definition, necessitates a realizational process, the point being that the former eliminates ab initio competing schemes, such as the one involved in the 'physico-theological argument' which proceeds from the assumption of a divine providence that has ordered the system of things in a teleologically fitting fashion. The assumption of a divine designing 'architect', argues Kant, is at best a mere hypothesis, since one moves here from a presumed pre-existing systemicity of nature to a hypothetical cause of such a design. But, Kant maintains, "if I begin with a supreme purposive being as the ground of all things, the unity of nature is really surrendered, as being quite foreign and accidental to the nature of things There then arises a vicious circle; we are assuming just that very point which is mainly in dispute" (A693/ B721).

What is required instead is that the "purposiveness of nature" should be something "not known merely empirically but as presupposed a priori" (*ibid.*), as a transcendental condition of its systemicity. (Note that since the deity, on the alternative supposition, would yield

— albeit per impossibile — the unity of nature as something 'existing in itself', that unity would possess only "empirical" status, a contention which parallels Kant's similar use (with respect to individual objects) of the notion of things in themselves at A129, noted previously, where he argues that if we derived our knowledge of the categories from things as they are in themselves, "our concepts would be only empirical, not a priori".) By contrast, the unity can acquire a priori status only if, as we have seen, the ontological foundation of systemicity is supplied by way of a 'critical realization' procedure, thus yielding the required systems ontology, on the lines explained before.

Corresponding to the case of the individual object, reduction will result in the "idea" of the system or unity of nature as possessing the status merely of a "transcendental object" ($T_0(\theta)$), the very term being employed by Kant at A698/B726, except that there it refers to the "ground" of the systematic unity rather than the unity itself, the 'ground' being viewed as the fiction of an "omnipotent author of the world" (A697/B725). The difference will become clearer as we proceed.

But first it will be useful to consider the structure of Kant's overall scheme by reference to Figure 2. $T_0(\theta)$ indicates the idea of the systematic unity of nature, so far 'idling', with 'merely transcendental' import, but also lacking not only an "object" in the sense of something "existing in itself" ($T_n(\theta)$; cf. A677/B705; A681/B709), but even the "projection" of such a unity ($T_a(\theta)$), since the regulative maxims are not as yet called into operation, subsisting so far merely as a set of logical concepts. Parallelling now the argument concerning individual objects, a 'critical' realization of $T_o(\theta)$ will then yield the system or unity of nature qua 'appearance' ($T_a(\theta)$). Only thus can we be 'a priori certain' that the regulative employment of theoretical reason ($R(\theta)$) will be actually capable, in principle at least, of yielding the unity as an object of "experience as a system" ($T_a(\theta)$; cf. A651/B679), always remembering that $T_a(\theta)$ represents only the 'projection' of such a system, with merely 'regulative' and not 'constitutive' import).

At this juncture the 'two points of view' approach is again placed by Kant in the foreground of the picture, in a way that is relevant to the theological dimension of his thought. He imagines an alternative type of realization — albeit with purely fictional import — partly echoing the pre-critical position with respect to the divine element in nature, but purged now of its existential or metaphysical implications. The need for such a couterfactual assumption is apparently that

the greatest possible empirical employment of my reason rests upon an idea (that of a systematically *complete* unity)... which, although it can never itself be adequately exhibited in experience, is yet indispensably *necessary* in order that we may approximate to the highest possible degree of empirical unity. [Hence] I shall not only be entitled, but shall also be *constrained*, to realise this idea, that is, to posit for it a real object. But I may posit it only as something which I do not at all know in itself, and to which, as a ground of that systematic unity, I ascribe, in relation to this unity, such properties as are analogous to the concepts employed by the understanding in the empirical sphere (A677/B705; my italics).

There is a difficulty about this passage, in that it seems to slide almost imperceptibly from the notion of a 'completed unity in itself' to the "ground" or "substratum" of that unity, namely of a "divine being as self-subsistent" or "supreme reason", which would yield (by way of the realizational process) "the object of my idea according to what it may be in itself". As a result we then "represent all connections as if they were the ordinances of a supreme reason, of which our reason is but a faint copy" (A678/B706; italics in text).

To clarify this, let us prefix some general preliminaries. We have noted Kant's slide from 'the idea of the unity of nature' to 'the ground' of this unity — its 'ground' being construed in terms either of human or of divine reason (R(h)) or R(d); cf. Figure 2, which the reader should keep in mind throughout what follows in order to gain the required clarity about the complex of the relations involved in Kant's argument). Evidently, the slide involves a move from 'object' to 'subject', both of which thus become alternative candidates for 'realization': or, in realizing one, we also thereby realize the other. Similarly, the expression "transcendental object" denotes, alternatively, reason (either human or divine) at the stage of reduction, or the "systematic unity" of nature, likewise at this stage. (At A679/B707 and A698/B726, the term "transcendental object" thus appears to denote the divine ground (as a fictional entity) of the systematic unity that results under realization $(T_{\bullet}(\theta)]$.)

As a typical example of Kant's slide, consider the passage at A681/B709. Here Kant contends that human theoretical "reason cannot think this systematic unity $[T_a(\theta)]$, which possesses a merely 'projective' or 'regulative' status] otherwise than by giving to its idea an object". The function of this 'object' is to yield that "complete sys-

tematic unity" (with quasi-constitutive import, analogous to something 'existing in itself', $T_n(\theta)$) which theoretical reason "can never give an example of"; the "object" in the present passage being characterized as the divine "ground" of such a "complete systematic unity" (R(d)). This is evidently similar to the argument in the passage quoted earlier, A677/B705, where we are said to require the idea of a "systematically complete unity", because this "can never itself be adequately exhibited in experience" and is yet "indispensably necessary", in order to give meaning to our attempts at "approximating to the highest possible degree of empirical unity"; and where, in order to achieve this, Kant goes on to say that we are "constrained to realize this idea, that is, to posit for it a real object", which turns out to be "the ground of that systematic unity" -R(d) as the 'ground' of $T_n(\theta)$; the latter a 'quasi-realization' of $T_0(\theta)$, as we have termed this in Figure 2.

The deeper reason for this slide from $T_n(\theta)$ to R(d), and the corresponding one from $T_{\mathfrak{g}}(\theta)$ to $R(\theta)$, is connected with the frequent merging throughout Kant's philosophy of 'object' and 'subject', particularly at the 'transcendental' level. We have met with this already in our earlier account of Kant's notion of 'realization' at the level of the individual object, relative to the understanding, in particular where (as we saw) this was described as the "realizing" of the understanding and its categories by the "schemata of sensibility" (cf. A146/ B186f.). The conflation of the two levels manifests itself most plainly in respect of the starting-point of such a realization, the transcendental object, in respect of 'matter' and 'form', viz. $T_o(m,f)$; where in particular 'f' denoted the set of categories of the understanding, regarded as purely logical entities. (Here it is evident that the 'f' relates both to the 'object', T_o , and to the 'subject', i.e. the understanding.) Under realization, $T_o(m,f)$ is then converted into $T_c(m,f,c)$, the erstwhile logical categories of the understanding now entering, as schemata, c, into the account of structure of the realized object, as well as of the subject cognizant of such an object. (To somewhat bowdlerize this in modern idiom we might say that we discover ourselves in discovering the world around us.)

We must interpret Kant's account in a parallel way, operating at the level of reason. At A679/B707 or at A698/B726 he speaks of "the transcendental object of our idea" of the unity of nature which when realized, via the 'activation' of human theoretical reason, denotes both the uncompleteable $T_a(\theta)$ and alternatively the fictionally completed $T_n(\theta)$, as well as, finally, R(d), acting as the "ground" (*ibid*.) of $T_n(\theta)$ — evidence again for Kant's slide, the explanation for which is on lines similar to that just given for the case of the understanding, as the seat of the categories. In the present case, theoretical reason is regarded as the seat of the methodological maxims and principles which when activated are involved in the realization of $T_o(\theta)$ to $T_a(\theta)$, on analogy with which divine reason is regarded as the ground of $T_n(\theta)$. Kant seems to say that as in the case of the understanding, so here reason, both human and divine, are immanent in the world.

Why this need for the fiction of a divine reason, required for the realization of the unity of nature as a reality in itself? Kant seems to argue that although we are never 'justified', even in principle, in claiming any cognitive access to such a noumenal unity, and can thus only posit it 'on analogy' with such systems as scientific theorizing seems to put us in touch with, the fiction of this second type of realization is nevertheless essential as an image of the 'completed' unity which actual scientific reasoning is forever striving after. It is because actual science never achieves more than 'projections' of systematic unity, in accordance with its 'regulative' procedures, that we are "constrained" (as the above passage puts it) to imagine a noumenal type of realization, whose 'ground' would be the divine reason. In more mundane terms: in the context of science, the practice of research conflicts with the logical nature of its object; the 'idea' involved in that research is such as to presuppose its completeness. Indeed, so Kant seems to say, research, in itself incomplete, could never get off the ground unless it operated with this presupposition of completeness; the very notion of the unity of nature demands as much.

A modern parallel may here help. It is one of the contentions of Popperian methodology that 'the game of testing never comes to an end', that it is only possible to falsify theories but not to establish their truth. However, this position seems to presuppose that there is at least an intrinsic possibility of arriving at 'true' scientific theories. The very notion of falsifiability and falsification presupposes this possibility. It is of course arguable whether scientific theorizing in fact presupposes such a notion of 'truth in principle'; similarly, one may doubt whether Kant has done enough to show that 'completeness of system' has to be assumed as a kind of logical fiction, in

order to give sense to the activity of systematic theorizing. It may have been the eighteenth-century notion of the rational harmony of things that supported Kant's conviction that he had sufficiently established a 'theoretical' ground for the place of God in the scheme of things. However, my concern here is simply with displaying the architectonic of the Kantian argument, in its search for intelligibility of the concept of God in the context of science.

For Kant, the main point in all this, at any rate, is that the basic difference between the cases of the understanding and of theoretical reason is that the realization procedure which involves the regulative employment of reason differs from the equivalent realization process that involves the understanding, in that, unlike the latter, it does not yield an object, in the 'constitutive' sense of the term. The important consequence of this is that unlike the previous case, the move from $T_{\theta}(\theta)$ to $T_{\theta}(\theta)$ – the "supersensible substratum of things" – acquires a significant function, namely (in Kant's view) that of giving a necessary meaning to reason's methodologically-determined endless search for and projection of systematic unity, thus completing the 'incomplete' and intrinsically 'incompletable unity' of $T_a(\theta)$, and yielding at least something like a 'quasi-object'. Clearly this is the sense of the passage from CJ, cited above, where Kant says that in the context of theoretical reason (or reflective judgement) "the supersensible substratum of things" becomes "determinable by means of the intellectual capacity" for judging reflectively, or reasoning theoretically; 'becoming determinable' here standing for 'acquiring a significant function', in the sense just explained.

So we see that it is because the realization of $T_0(\theta)$ as $T_a(\theta)$ is an incomplete and incompletable process, that we require recourse to the alternative, leading from $T_0(\theta)$ to $T_n(\theta)$. Thus, whilst at the level of the understanding realization of T_0 to T_n failed to yield any intelligible function for T_n , leaving the latter and its 'substratum' quite 'undetermined', in the case of theory it does acquire an intelligible function. True, Kant certainly admits that to the extent that we posit such an alternative theological speech-form this has only the status of a 'transcendental illusion'; however, like all transcendental illusions, it is a necessary one without which the ultimate significance and power of scientific reason will remain incomplete. Reason, so he seems to say, pretends to look for a pre-existing unity; it does not just blindly operate with its methodological tools.

The means by which the 'two points of view' approach paves the way for such constructions was subsequently taken further in the Critique of Judgement, sect. 77, the section which exerted such profound influence on such figures as Goethe and Schelling. Here, the systems approach is formulated in teleological terms - remember that already in the CPR Kant had equated "systematic" with "purposive unity" (A699/B727); all of which facilitated the move from the systematic order of the world to the image of its being purposefully arranged by virtue of the commands of a fictional deity. In the CJ Kant then argues that to the extent to which the world is being viewed as "mere appearance", and thus subject solely to mechanical laws and arrangements, we may also "think as its substratum something as thing in itself", and "attach to this a corresponding intellectual intuition (though not ours)"; where such a form of intuition is to be interpreted in the present context as the action of a "reason" whose objects are a "teleological" kind of "agreement and unity of the particular laws and forms" (Ak. ed., p. 409; Bernard trans., p. 257). Here again, it will be noted, we meet with our 'slide': the notions of unity as subsisting 'in itself', and of a divine reason as its 'ground' or 'condition' for Kant being equivalent modes of speech; not surprising since the process of 'realization' quite generally involves the building of its conditions into the resulting object, or as here, the system of objects.

IV

Let us now turn very briefly to a consideration of the right-hand side of the pictorial representation given in Figure 2; of the place and function of practical reason in Kant's topological scheme. (Very briefly only, since this is not the place to discuss in detail Kant's moral philosophy, but once again, as already indicated, to focus primarily on the significance of the architectonic configuration of Kant's overall scheme; partly because here, even more than elsewhere, it is the architectonic that seems to lend what strength there is to the conclusions of Kant's theological scheme.)

In what has preceded we have already noted that God, as the fictional ground of the world, is viewed by Kant as the designing source of that system; it is 'as if', so Kant frequently phrases this, God had planned the fittingness of the parts thus systematically cohering. It was this which allowed him to regard systematic unity as something

purposeful, constituting a teleologically organized whole; as if God had planned it that way, rather than human reason thus regulatively constructing and construing it.

This, then, is one application of the domain of purposiveness. There is, however, according to Kant's account, a second such domain which occurs in the context of morality. Here, reason (in its practical employment) is supposed to "determine" its object; to the extent that man does what he *ought* to do, he, viewed as 'noumenon' — interpreted, as we have seen, via "causality of freedom" — brings about, or as it were 'produces', his own ends (in Figure 2 symbolized as $T_n(p)$, the noumenon in the practical context, as explained towards the end of Section II above).

The theological dimension of all this is then developed by Kant roughly as follows. Man's moral action in accordance with duty is what we mean by 'virtue'; but further, such virtuous action necessarily presupposes the thought of man being in harmony with the world. However, this idea of harmony in turn equally demands that the structure of the physical world should be such as to harmonize with man's moral purposes; but this is what we conventionally mean by speaking of God's purposes being fulfilled. And so, Kant concludes, the very notion of a completely moral human being requires the idea of a God who functions as the foundation of the necessary harmony between physical and moral purposefulness. (Cf. Critique of Judgement, sect. 87, for the most succinct version of this argument.) This, roughly, though not in Kant's own words, is the import of his "Postulate of Practical Reason": the existence of God. Notice that there is nothing 'hypothetical' about this notion of God as a 'postulate' in the context of practical reason; it is simply a necessary entailment of the concept of a moral being, acting in its noumenal capacity. We must not say: if God exists, there can be moral action; but rather: the fact of moral action entails God's existence. It will thus be seen that unlike the case of 'theoretical reason', in the context of 'practical reason' the function of the divine is not one of supplying an alternative realization but merely that of making explicit what was already implied in the realized concept of the noumenon on purely moral grounds.

So much for the right-hand side of Figure 2. But Kant does not stop here. So far he has envisaged two kingdoms of purposes, one operating in the theoretical domain, under a fictional notion of the deity; the other in the practical domain, yielding the notion of the deity as something "actual" — the term used in sect. 88 of CJ, where Kant speaks of "the actuality of a highest morally legislating author" being established, albeit "merely for the practical use of our reason". So we have, thus far, two sets of principles, one natural, the other moral. But now, as the culmination, the apex of the whole theological edifice, Kant once more invokes reason, whose primary maxim it is after all, he writes, to "seek unity of principles so far as is possible" (loc. cit., Ak. ed., p. 456; Bernard trans. p. 307). The argument goes as follows: qua postulate of practical reason, the idea of God has "practical reality"; "to its aid" we now "bring the reality" which the idea of God possesses for us in the "theoretical point of view".

Now we saw that in the 'theoretical' context, the idea of God stands for a mere fiction, though also, and at the same time, bestowing significance on what Kant calls the kingdom of natural purposes, by interpreting this notion in terms of the context of scientific theories. (Remember that the 'divine substratum' was supposed to yield the ground of the system of empirical scientific laws as a completed whole.) Speaking popularly, we might therefore say that in this context, the notion of God, though purely fictional, is given a meaning. In the practical context, the idea of God designates something possessing "actuality", though not of course implying thereby any existential import with respect to empirical (scientifico-theoretical) reality (this falls into an entirely different dimension). But this is what reason has now to achieve: the joining of the practical actuality of God - albeit a non-existential notion - to the *fictional* but theoretically meaningful content of systematic purposefulness. In other words, we join the knowledge of physical teleology to that of purposiveness in the practical respect, thereby achieving the 'objective reality of the idea of God', as Kant puts it in those last pages of the Critique of Judgement: the coping-stone, as it were, of his three Critiques:

For the theoretical reflective judgement [reason in its theoretical employment] physical teleology had sufficiently proved from the purposes of nature an intelligent world cause; for the practical judgement, moral theology establishes this by the concept of final purpose, which it has to ascribe to creation in a practical point of view. Now, the objective reality of the idea of God, as moral author of the world, cannot, it is true, be established by means of physical purposes alone. But nevertheless, if the cognition of these purposes is combined with that of the moral purpose, then those physical purposes are, by virtue of the maxim of pure reason, which bids us seek unity of principles so far as is possible, of great significance for the practical reality of that idea, by bringing to its aid

the reality which it possesses for the judgement in a theoretical point of view (op. cit., para. 88, Ak. ed., V, 456; Bernard trans., p. 307; cf. also Introduction, sect. ix, for a more condensed statement of the same argument).

All this sounds like some kind of formal arithmetic; postulational actuality plus fictional ideality equals objective reality, as I have sought to indicate by the upper bracket in Figure 2, which moreover, as will be seen, is the mirror-image of the lower bracket, where 'human reason' (simpliciter) lies at the junction of theoretical and practical reason; divine reason, as always in Kant, mirroring human reason. It is as though he was joining the semantic content of science to the ontic actuality of the system of purposes under God. But then, Kant's God has throughout been shown to be no more than a symbolic representation of certain aspects of the domains of nature and of morality. To be sure, the 'bringing together' of these two domains is an entirely formal or topological exercise. We may view it as resembling some formal aesthetic tensions in a great painting, which thereby seek to give expression to certain deeper truths that underlie the pictorial representation itself. The Kantian argument is not meant to lead to some deductive existential conclusions; its significance exhausts itself in depicting the formal relationships that underlie and unite the theoretical and practical concerns of man. Alternatively we may phrase Kant's argument in a somewhat bowdlerized fashion, as follows. The moral nature of my actions as such could only express itself via a universe planned to accord with my moral aims; the existence of such a planned universe accords with the evidently purposeful arrangement of the agencies of nature; therefore, the universe expresses the kind of teleological arrangement which (albeit by definition only) is the result of the actions of a divine agent. And it is in any case worth noting that Kant added a Note to Para. 87 of the Second Edition of CJ, where he remarks that the "moral argument does not supply any objectively valid proof of the Existence of God, ... but [only] proves that if one wishes to think in a way consonant with morality, one must admit the assumption of this proposition under the maxims of practical reason" (Ak. ed., V, 450-1; Bernard trans., p. 301).

It is also worth noting that in *CPrR*, where Kant already attempts something like a unification of the insights of theoretical and practical reason, he actually suggests the more radical thesis that practical reason should in fact have "primacy" over theoretical reason (cf. op. cit., Pt I, II.iii (trans. Lewis White Beck, 1956, p. 126)). His argu-

ment there rotates round a notion which Jürgen Habermas – partly inspired by Kant – has made prominent more recently in his own writings, namely the notion of 'interest' (cf. his Knowledge and Human Interests (1971), pp. 198ff.). In Kant - as subsequently in Habermas - 'interest' has a transcendental function. Thus for Kant, whilst in the first instance the "interest of reason" expresses itself in purely 'methodological' respects, via the maxims of reason, and thus as something merely "subjective", yet by virtue of the fact as we have explained – that these maxims come to function also 'ontologically', i.e., as "transcendental principles", 'interest' itself must thereby likewise acquire a transcendental status. Thus, as Kant once implies, the 'unity of nature' cannot be "postulated a priori, without reference to any such interest of reason" (A648/B676), provided that the latter is assigned a transcendental function. Evidently, then, this notion simply condenses the whole transcendental or 'critical' realization process as explained previously. The interest of theoretical reason expresses itself through the systematic processes of science, subject to its maxims which possess both methodological and transcendental import. In a similar way, the interest of practical reason expresses itself as the performance of duty under law, in accordance with the concept of the causality of freedom. However, so Kant now argues in an exceedingly modern fashion, ultimately all interests are 'practical', whether they have as their domain the control over nature or over morality. There is in the end, he remarks, only "one and the same reason", except that the domain of the "practical" ultimately "extends" that of the theoretical, rather than vice versa. Therefore reason must "compare and connect" the concept of God which its analytical insights have revealed in theoretical respects, with the demands of practical reason. So whilst originally theoretical reason yields only a fictional notion of God, this is enlarged by practical reason to yield for it a substantial status (cf. Ak. ed., pp. 120-1; trans. L.W. Beck, pp. 125-6).

V

Let us, in conclusion, once more focus on the general significance of this transcendental approach to theology. We see, first of all, that the notion of the Godhead has restored to it here a significance which transcends merely human ends and human consciousness – unlike some modern theological doctrines. Nor is it the case that the fiction and the postulate of God - relative to theoretical and practical reason, respectively – is in this system a merely fanciful excrescence, grafted on some concrete empirical reality. For as we have tried to show, there is for Kant no such reality, simpliciter, taken as subsisting 'in itself', let alone grounded in the 'speculative' notion of a divine source. For as we have seen, all reality is here conditionalized or relativized transcendentally – a point of view for which we have employed the conception of the reduction-realization procedure. Without prior reduction, no transcendental argument, and hence no argument seeking to provide an ontological foundation for reality, can get off the ground in the first place. Empirical objects, just as much as any system of such objects and all that goes with it, are throughout creatures of a process of realization, of the kind we have tried to define. Each element in the structure indicated in the pictorial representations of Figures 1 and 2 has an equal right to be viewed as an element of 'ultimate reality'.

Admittedly, the reduction-realization process is a kind of 'philosophical game', a game meant to bestow fresh significance on the enterprise of ontology and of the associated transcendental framework of the world. And philosophical games of this kind in a sense leave the world – as Wittgenstein remarks – exactly as it was before; "the world" in what I have called its 'phenomenological' respects. What this really means is that such games operate subject to the requirement that they should - pace Rorty - not only restore but also illuminate the various speech-modes that we employ, including those involved in theological contexts. Such games seek to interpret, and thus to clarify, the status of the framework governing existing speechmodes. Thus, if we direct our enquiries on the lines of the Kantian game, we can give a sense to the notion of the 'validity' of the methodological framework of science; or again, to the idea of grounding the system of the world in a divine source. All such ontologies leave the world, qua its phenomenological manifestations, entirely untouched. Nevertheless, and equally obviously, they may affect our attitudes towards the phenomenological side of things. If we can learn to understand the nature of the ontology of the elements of a system, we may also come to acquire a new attitude towards its phenomenological manifestations. The practical application of this to the idea of God ought to be obvious both to those who have an interest in and to those who fail to sympathize with the religious dimension of things and thought.¹¹

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NOTES

- ¹ Blackwell, Oxford, 1980.
- ² Cf. Leibniz, *Philosophical Papers and Letters*, 2 vols., trans. and ed. L.E. Loemker, (Chicago, 1956).
- ³ For an account of the 'reduction-realization' approach see the author's Kant and the Dynamics of Reason (Blackwell, Oxford, UK and Cambridge, U.S.A.), 1992, ch. 3, 'Reduction-Realization: A Key to the Structure of Kant's Thought', pp. 53–103, and ch. 4, 'Realism and Realization in a Kantian Light', pp. 104–34. For a general account of Kant's philosophy, see my Metaphysics and the Philosophy of Science (Blackwell, Oxford, 1969; University Press of America, Lanham, MD, 1988), ch. 8.
- ⁴ For Husserl, cf. his *Die Krisis der Europäischen Wissenschaften und die Transzendentale Phänomenologie*, ed. W. Biemel (Martinus Nijhoff, 1962), especially paras. 32–51.
- ⁵ Ak. ed., I, 385–416. Trans. in F.E. England, Kant's Conception of God (London, Unwin, 1929), pp. 212–52. See also the translation of ND by John Reuscher in Kant's Latin Writings, ed. L.W. Beck, (New York/Bern/Frankfurt: Peter Lang, 1986), pp. 57–109.
- ⁶ 'A' and 'b' respectively denote the First and Second editions of Kant's *Critique of Pure Reason*, trans. Norman Kemp Smith (Macmillan, London, 1953).
- ⁷ For the connection between 'causality' and 'empirical sequence' cf. also my 'Causality, Causal Laws and Scientific Theory in the Philosophy of Kant', in *The British Journal for the Philosophy of Science*, XVI No. 63 (1965), 187–208; and Note 3 above, ch. 9, 'The Kantian "Dynamic of Reason", with special reference to the Place of Causality in Kant's system', pp. 195–221.
- ⁸ Cf. also CPrR, p. 44, trans. Lewis White Beck (Bobbs-Merrill, 1956).
- ⁹ My own translation. Note that where Kant says: "I could not realize this thought [Ich konnte diesen Gedanken nicht realisieren]", Beck translates: "I could not give content to this supposition" (Beck translation p. 50) evidence that philosophical positions can influence an author's translation!
- ¹⁰ I have also used the translation by J.H. Bernard (Hafner, New York, 1951), p. 33, though with modifications.
- ¹¹ This essay has also been published in Vol. xxx, Supplement, *The Southern Journal of Philosophy*, 1991, Memphis State University: 'System and Teleology in Kant's *Critique of Judgement*, and it forms ch. 14 of the author's *Kant and the Dynamics of Reason: Essays on the Structure of Kant's Philosophy* (Blackwell, Oxford, UK & Cambridge U.S.A., 1992).