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Kant's Two-Tiered Response to Scepticism

Sumangali Rajiva

A Thesis
in
The Department
of
Philosophy

Presented in Partial Fulfillment of the Requirements
for the degree of Master of Arts at
Concordia University
Montreal, Quebec, Canada

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ABSTRACT

Kant's Two-Tiered Response to Scepticism

Sumangali Rajiva

Kant is supposed to have responded to Hume's scepticism by showing in the Critique of Pure Reason that concepts such as causality are structural components of experience and knowledge. This thesis argues that Kant's response to Hume's scepticism is best understood as two-tiered, beginning in the Critique of Pure Reason and continuing in the Critique of Judgment.

The first tier is the construction of a framework of possible experience and the second is the development of a principle of systematicity in knowledge. Traditionally the framework of possible experience has been interpreted so strongly as to shoulder most of the burden of the response to scepticism, which negatively affects not only the framework itself, but also the construal of the principle of systematicity, making it fundamentally heuristic rather than constructive. This thesis will be arguing that the framework of possible experience must be construed in a much weaker fashion, not only to resolve its own problems but to pave the way for a more solid grounding of the role of the principle of systematicity.

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INTRODUCTION

Through his "Copernican revolution" and the transcendental methodology of the Critique of Pure Reason Kant responded to the sceptical threat to knowledge that Hume had brought to a head. It can be argued that this response is essentially two-tiered, with the first tier located primarily in the arguments of the Critique of Pure Reason and the second located primarily in the Critique of Judgment, particularly in the second half.¹ However, the first tier takes on a special character in the context of the Critique of Judgment, while the second tier is given a preliminary sketch in the Critique of Pure Reason.²

¹All references to the Critique of Pure Reason and the Critique of Judgment will be to the following sources: Immanuel Kant, Critique of Pure Reason, trans. Norman Kemp Smith, New York: St. Martin's Press, 1965 (1929); Immanuel Kant, Critique of Judgment, trans. & intro. Werner S. Pluhar, Indianapolis: Hackett Publishing Company, 1987. References to the First Introduction to the Critique of Judgment, will also be to the latter text. The references will be cited in the body of the text with the Critique of Pure Reason cited in its standard form as 'A' and 'B' for the first and second editions respectively, each followed by the respective page numbers. The Critique of Judgment will be abbreviated in citation to C of J, and the page numbers will follow from the Pluhar translation. The First Introduction will be abbreviated to FI and will be followed by C of J and the page numbers from the Pluhar translation.

²In this two-tiered approach to the refutation of scepticism, I am following, to a great extent, the views of George Schrader in his article "The Status of Teleological

I will be discussing the contribution of the Critique of Judgment to the second tier, with particular reference to the role of reflective judgment and the concept of purposiveness without purpose, and in the process show why it is necessary to interpret the first tier in the light of the second. This will involve discussing the first tier as it is presented in the Critique of Pure Reason and reassessing its usual characterization. I will argue that this first line of defence against scepticism needs to be construed in a far weaker manner than it traditionally has been, both for reasons intrinsic to this first tier and because the weak construal of this first tier is crucial for a satisfactory characterization of the second.

Classical discussions of Hume's scepticism and Kant's response to it focus upon the arguments of the Critique of Pure Reason, tending to neglect the work picturesquely characterized as "the crowning phase of the critical

Judgments in the Critical philosophy." Schrader does not make use of the two-tiered reference, but his analysis of judgement ties it to both tiers in both Critiques through an analysis of three levels at which judgment functions. The two tiers I refer to correspond to the first two levels, which are the relevant levels for the refutation of epistemological scepticism. I will not be dealing with the third level, crucial though it is to Kant's philosophy as a whole, except insofar as it impinges upon the refutation of epistemological scepticism, and I also differ from Schrader in considering the nature of the role that judgment plays in the first Critique's construction of possible experience. See George Schrader, "The Status of Teleological Judgment in the Critical Philosophy," Kant-Studien. XLV, (1953-54)

philosophy."³ Correspondingly, these discussions tend to focus upon scepticism's attack on basic concepts of knowledge such as causality. I will argue that this is the first line of attack in Hume's scepticism, and that Kant's response in the first Critique is not only the first line of defense against it, but, as George Schrader has argued, needs significant reinforcement by the arguments of the third Critique.

In Kant's Concept of Teleology, J.D. McFarland contends that Kant's epistemological refutation of Hume in the 1st. Critique still leaves untouched the problem of induction.⁴ In McFarland's opinion, this problem is only addressed via the use of teleology in the Critique of Judgment and his own analysis takes this up. The problem as McFarland outlines it, and as it will be taken up in this discussion, has very little to do with induction per se, especially as a scientific technique, or with related questions concerning probability; it is essentially a problem concerning induction in general, or concerning the principle of induction. To put it more strongly, it is the problem of knowledge.⁵ This does not mean

³The title of R.A.C. Macmillan's discussion of the Critique of Judgment. R.A.C. Macmillan, The Crowning Phase of the Critical Philosophy: A Study in Kant's "Critique of Judgment", (New York & London: Garland Publishing Inc., 1976; Originally published London: Macmillan and Co., 1912)

⁴J.D. McFarland, Kant's Concept of Teleology, (Edinburgh: Edinburgh University Press, 1970.), 9 & 23.

⁵I have taken this characterization of the problem from the title of the book by A.J. Ayer, where he gives an account of scepticism in terms which are contemporary but essentially Humean. His response to the sceptic is symbolized (though not

that it has no connection with probability or induction per se, but only that the problem will be discussed in its most general form.

Although McFarland's arguments provide a substantial basis for the analysis of a central concept of judgment, purposiveness without purpose, and its use in responding to the problem of induction, there are some significant points that he either does not deal with or does not emphasize. He tends to ascribe what I will be arguing is an unusually strong role to the project of the Critique of Pure Reason, one in which it is made to shoulder the burden of the problem of knowledge as well as the construction of possible experience. In the end he accepts purposiveness as a heuristic device for investigation; there seem to be grave difficulties in doing this as far as the sceptical question is concerned. After all, Hume was prepared to accept coherence and continuity as heuristic devices for the purposes of knowledge as long as this entailed no delusions about their theoretical status; if there is no more to Kant's use of purposiveness than the relegation of it to a simple tool, then it seems that his

summarized) by his statement that the gap between the sceptic's premises, which Ayer accepts, and their conclusion, which he does not, is not to be bridged: "we are simply to take it in our stride." Although I disagree with this response, which is very similar to Hume's, Ayer's formulation of the problem of knowledge makes Hume's position particularly clear and concise in contemporary language; this is especially beneficial since, unlike his treatment of causality, Hume gives no organized account of the problem of induction. See A.J. Ayer, The Problem of Knowledge, (Penguin Books, 1956), 80 and Chapters 1 & 2.

Copernican revolution was for naught. If there is more to the transcendental turn than heuristics, then there must be something more to purposiveness without purpose than the status of a tool.

What that something more consists of is, nonetheless, a tricky question. As McFarland points out, a principle like causality becomes in Kant a necessary condition for possible experience in general, which does not then guarantee us anything about the specific nature of that experience.⁶ This means that the specific continuity and coherence of knowledge cannot be transcendentially grounded as the basis of possible experience, i.e., empirical coherence does not follow from transcendental coherence. Specificity, for Kant, must be rendered by experience, albeit scientific and systematized experience. And an experiential source of knowledge cannot give us universality and necessity.

Nevertheless there is a subjective necessity for the continuity and coherence of knowledge⁷ that is indispensable to the construction of both experience and knowledge, though not, I will argue, to the construction of possible experience.⁸ That these ideas have movement has already been

⁶McFarland, 11-24.

⁷Using "subjective" non-pejoratively in relation to the movement of our ideas.

⁸Kant does not frequently make this distinction explicit, but it is implied by numerous references to both "experience" per se and the "possibility of experience." This is

shown in the Critique of Pure Reason, where reason, seeking always the completion of its ideas, moves constantly beyond possible experience and hence into the realm of antinomy. In the Critique of Judgment such movement is tied firmly to the yoke of theoretical knowledge and confined strictly to the bounds of experience. Nevertheless, there are suggestions of a metaphysical nature, that tie the subjective workings of the judgment⁹ to both phenomenal experience and supersensible being. For the purposes of this discussion, only those aspects of such metaphysics that may be relevant to any refutation of scepticism will be examined, though I will be arguing that this relevance consists primarily in hindering such a refutation.

McFarland also does not discuss the relationship of aesthetic purposiveness to natural purposiveness. Nevertheless, even if a relationship between the two is not obviously in evidence, there must, given their mutual

particularly the case in the Deductions, which are concerned with the possibility of an object of experience insofar as it is conceptually connected. See particularly A 92-94; B 125-127. His explicit discussion of possible and actual experience occurs at A 218-234; B 265-287, in the discussion of the Postulates of Empirical Thought.

⁹It must be noted that there are also objective workings of the judgment; these are part of what Kant calls the determinant judgment, where experience is subsumed under rules or laws already determined. It is the reflective judgment (concerning such items as the unity of nature) that must determine experience without rules or laws already given; as such, it cannot be objective, i.e., it cannot constrain nature to its determinations but must use these methodologically to guide scientific investigation.

relationship to the faculty of judgment, be some influence of the one upon the other. At the very least, the difference of natural purposiveness from aesthetic purposiveness might be of a certain metaphysical interest; certainly they both differ from the moral teleology that some contend is central to Kant's ethics.¹⁰ For these reasons, I would like to include a discussion of aesthetic purposiveness in this thesis; however, such a discussion would obviously confine itself to those aspects of aesthetic judgment that affect natural purposiveness rather than extend its range to include Kant's aesthetics as such.

My other significant departure from McFarland is based on George Schrader's analysis of judgment, and involves his contention that the constituting of possible experience through the schematized categories, is, in the case of causality at least, not feasible without the assumption of empirical coherence. Following Schrader, I will contend that this assumption does not get systematically developed until the Critique of Judgment; I will also argue that much of the difficulty surrounding the Second Analogy arises from Kant's implicit assumption in its discussion of this coherence, an assumption that receives little explication in the rest of the

¹⁰See Thomas Auxter, Kant's Moral Teleology, (Macon, Ga.: Mercer University Press, 1982), as well as Ping-Cheung Lo. "A Critical Reevaluation of the Alleged 'Empty Formalism' Kantian Ethics." Ethics. 91, Jan. 1981.

Critique. Nevertheless, the one overt reference to it seems sufficient to confirm its importance to the constituting of experience, and hence to confirm Schrader's analysis, to some extent. Against Schrader I will argue, nonetheless, that empirical coherence properly belongs to actual experience, and hence is not an intrinsic part of possible experience; and that to conflate actual and possible experience in discussing empirical coherence is to conflate the two lines of defence in Kant's response to scepticism.

In discussing empirical coherence three questions concerning it will be kept in mind in relation to the First and Third Critiques. The first is the putative necessity of this notion in Kant's response to Hume, and its possible role in the critical structure. The second is the question of whether empirical coherence as such makes sense; this will not be treated, however, as a separate topic or issue, but in its relation to the third question. This is whether Kant comes up with an adequate notion of empirical coherence, and one of the criteria for such adequacy will be whether his notion, systematic purposiveness without purpose, is more than a heuristic device.

The working premise of this thesis will be that the central concept of Kant's teleology is the concept of purposiveness without purpose, for epistemological purposes at least. This concept forms the backbone of Kant's concept of reflective judgment, a concept significant for any response to

the sceptical question concerning induction, and hence crucial for Kant's salvaging of the enterprise of knowing.

The resolution of the problem of knowledge is complicated by Kant's fluctuation in the Critique of Judgment between "neutral" and strongly theistic conceptions of purposiveness without purpose; another way of characterizing these, respectively, would be as weak and strong conceptions of purposiveness. It is the theistic conception that underlies the metaphysical task of the Critique of Judgment; however, I will contend that on a purely epistemic level the theistic conception, which ties purposiveness without purpose to the supersensible basis of the phenomenal world, is not only unnecessary for resolving the problem of knowledge but positively impedes it. It does this because it emphasizes an ontological aspect of purposiveness without purpose which then detracts from its systematic (and non-ontological) use and renders Kant's argument at once too strong and hence susceptible of criticism. I will be arguing that a weaker rendering of his argument, which disentangles the metaphysical and epistemic tasks, might at least salvage the results of the latter, although no attempt will be made here to spell out the intricacies of such a rendering.¹¹

¹¹A possible criticism of attempting a weaker position than Kant's actual one is the argument that cutting out so much from his position, particularly the supersensible basis so crucial to both his moral theory and his metaphysics, will make the position fundamentally non-Kantian, savaging rather than salvaging his project. Perhaps in a larger, more metaphysical sense this is true, but epistemically, at least,

The structure of the discussion will be as follows: Chapter One gives an account of Hume's problems of causation and induction; Chapter Two outlines the general structure of Kant's project in the Critique of Pure Reason up to and including his doctrine of Schematism; Chapter Three focuses on the first line of defence against scepticism, the proof of causality in the Second Analogy, and introduces the problem of empirical unity which becomes so important in the second line of defence; Chapter Four briefly examines this second line of defence, the consideration of the problem of induction or systematicity, as Kant discusses it in the second part of the Critique of Pure Reason; and Chapter Five discusses purposiveness without purpose and the role of judgment in the Critique of Judgment, and the problems that attend Kant's exposition of systematicity in it, with the goal of unearthing a more comprehensive and satisfying answer to the problem of induction than that given in the Critique of Pure Reason.

a weaker position than Kant's actual one could remain fundamentally Kantian if not literally Kant's.

CHAPTER ONE

HUME'S PROBLEMS OF CAUSALITY AND INDUCTION

In Kant's Concept of Teleology, J.D. McFarland shows that Kant's epistemological refutation of Hume in the 1st. Critique still leaves untouched the problem of induction¹² and that, in McFarland's opinion, this problem is only really addressed via the use of teleology in the Critique of Judgment. Before looking at how the problem is addressed, however, it must be set out. Hume, after all, has his own answers to the problem he unearthed and it would be beneficial to lay out clearly the parameters within which he raises the problem of induction, and to assess his response to it. Why his response is not ultimately satisfactory, even when viewed in the context of the natural belief system that Kemp Smith places him in, only highlights the difference in Kant's own response. This difference exists, in my opinion, whether one sees Hume as a proponent of natural belief or as a deconstructing sceptic.

Since the context is one of presenting Hume's ideas as a propaedeutic to Kant's thought, two points must be kept in mind. One is that Kant definitely read the Enquiry Concerning

¹²McFarland, Kant's Concept of Teleology, 9 & 23.

Human Understanding, which was translated into German in 1755,¹³ but is not known to have read the Treatise, although he was acquainted with its views by quotation and second-hand.¹⁴ Thus his direct acquaintance with Hume's epistemology is with a work specifically concerned with the understanding, rather than with the Treatise, where the aim is the science of man. Moreover, as one commentator points out, a new twist is given to the problem of knowledge in the Enquiry, since "the skeptical argument concerning induction is developed within the framework of an explicitly stated distinction between Relations of Ideas and Matters of Fact."¹⁵

The second point concerns the two main approaches to Hume in the past.¹⁶ There is the approach that was taken by Reid and Beattie and which was reiterated by Green; it sees Hume mainly as a sceptic who brought to an ineluctable and unpalatable conclusion the assumptions of Locke and Berkeley.

¹³Lewis White Beck, Essays On Kant and Hume, (New Haven and London: Yale University Press, 1978), 113.

¹⁴According to Kemp Smith, Kant became "awakened" by quotations from the Treatise in Beattie's Essay on the Nature and Immutability of Truth. See Norman Kemp Smith, The Philosophy of David Hume, (London: Macmillan & Co., 1964; 1st. Edition 1941), 7. See Beck as well, 113-120.

¹⁵Robert J. Fogelin, Hume's Skepticism in the Treatise of Human Nature, (London: Routledge & Kegan Paul, 1985), 38. He acknowledges that this distinction may be implicit in Book I of the Treatise but that its first explicit reference comes on p.463 in Book III, "Of Morals". (Fogelin, 176).

¹⁶I have taken this identification of the two approaches from Terence Penelhum, Hume, (London and Basingstoke: The Macmillan Press, 1975), 17-18.

There is also the approach of Norman Kemp Smith, who has re-interpreted Hume as a proponent of natural belief and who therefore traces Hume's philosophical lineage back to Hutcheson rather than primarily to Locke and Berkeley. Kemp Smith gives both internal and external evidence to show that Hutcheson was the key influence upon Hume,¹⁷ especially because the former's analysis of the natural quality of morality set the latter to apply this natural aspect to knowledge. However, he himself points out that when Kant became acquainted via Beattie with the Treatise, "it was again the sceptical consequences of Hume's argument that counted...those which followed upon acceptance of Hume's criticism of the supposedly self-evident character of the causal axiom."¹⁸

Thus, whatever the contemporary re-evaluation of Hume in less sceptical and more constructive terms,¹⁹ the account here of his problem of induction must necessarily focus on his scepticism, in order to obtain a clear picture of the

¹⁷Kemp Smith, Hume, 14-20.

¹⁸Kemp Smith, Hume, 7.

¹⁹A good example of such a re-evaluation is Wade Robison's article "David Hume: Naturalist and Meta-sceptic". in Hume. A Re-evaluation, ed. Donald W. Livingston and James T. King. (New York: Fordham University Press, 1976). Robison contends that "Hume's main sceptical point is not that certain concepts do not or cannot apply to experience, but even though they do not apply we must apply them." (p.26) See also John P. Wright, "Hume's Academic Scepticism: A Reappraisal of His Philosophy of Human Understanding," in The Canadian Journal of Philosophy. vol.16 Number 3, Sept. (1986): 407-436, where he lays stress on the mitigated form of Hume's scepticism.

"recollection" or "reminder" that awoke Kant from his dogmatic slumbers.²⁰ In any case, as Penelhum points out, there is no real antagonism between these two methods of approaching Hume.²¹ As well, there seems to be an emerging third position, which refocuses attention upon Hume's scepticism as the nexus of his system, while taking into account the complexity of his relation to Locke and Berkeley as well as the positive side of his thinking.²²

²⁰. Beck had, in his translation of the Prolegomena, translated "Erinnerung" as "recollection," as if it referred to Kant's remembrance of what Hume had said on causality. However, as Beck points out, what Hume had said in the Enquiry could not have awakened Kant, and he renounces the previous translation. By becoming aware of the Treatise through Beattie, "Kant now realized that Hume had not confined his skeptical attacks to the putative necessity and intelligibility of specific causal judgments - attacks which he himself had participated - but had raised a serious problem about the causal principle itself." (Beck, 118) Thus, it is Hume's reminder of this problem that awakened Kant, not Kant's recollection. However, this does not apply to the problem of induction, since Hume does raise the question of the resemblance of the future to the past in the Enquiry. See, for example, David Hume, An Enquiry Concerning Human Understanding, in Enquiries, ed. L.A. Selby-Bigge. Third Edition revised P.H. Nidditch. (Oxford: Clarendon Press, 1975), 38.

²¹Penelhum, 17-18. In fact, he thinks that the Reid-Green interpretation is basically correct, even if it focuses too much on Book I of the Treatise as well as the 1st. Enquiry.

²². See, for example, Fogelin, Hume's Skepticism in the Treatise of Human Nature. See also Richard H. Popkin. The High Road to Pyrrhonism, ed. Richard A. Watson and James E. Force. (San Diego: Austin Hill Press, 1980). Again, A.J. Ayer has always accepted the sceptical formulation of Hume's ideas, perhaps in part because his own objections to scepticism in general are formulated within the context of a scepticism that is almost completely Humean in both detail and flavour. See his Hume, (Oxford: Oxford University Press, 1980), and for his formulation of Humean scepticism as a contemporary philosophical problem see The Problem of Knowledge, (Penguin

In Hume one sees epistemology confronted by an immutable core of scepticism within knowledge. This does not mean that within the confines of the Humean system, knowledge is impossible. Quite the contrary. Hume is exceedingly concerned to preserve the possibility of knowledge. However, he demands that that knowledge not be self-validating as a general sphere of experience; its philosophical validation must lie outside of itself, and for Hume, this means that it lies in experience, which in turn is founded upon sensation. So that knowledge must bow to confirmation through sense-experience but must also bow to the needs of experience as a whole, i.e., life-experience.

However, knowledge is necessary for the continuation of such life-experience; thus being necessary per se. Moreover, one may take actual pleasure in knowledge, in which case pleasure would presumably be the experience that validates that particular function of knowledge.

The central point in this scheme of things is that knowledge cannot stand independent of experience and the proof of this lack of independence is essentially a sceptical one. It rests upon the argument that the basic category of knowledge, i.e., causation, is not intrinsic to experience in

Books, 1956), 76-78, as well as The Central Questions of Philosophy, (Penguin Books, 1973), Chapters VII & VIII.

its most crucial aspect of necessity but is derived from experience and then projected back upon it. Furthermore, the basic premise of the project of knowing, i.e., that the future will resemble the past, can itself be shown to be based upon experience and inductive reasoning, so that it is not an infallible guide for the construction of a system of knowledge.

This makes very problematic the function of this premise as the essential motif of the search for knowledge, a motif that both justifies that search while constituting its innermost theme. Once we say that the resemblance of the future to the past is not necessary but is contingent, then the subjective momentum of knowledge seems undercut.²³

Hume's problems of causation and induction are set within the parameters of an empiricism that reduces objects to atomic sensations; this atomism is operative throughout his discussion of causality and induction, particularly the former, and gives him a criterion with which he can judge the legitimacy of connections between objects. When Kant approaches the problem of causality, he takes over some of these parameters, including the sensation/idea distinction, but uses them so differently that they virtually cease to be meaningful along Humean lines. As will be seen, this

²³By "subjective" I do not mean "personal" but only that it pertains, as Kant would put it, to the movement of our ideas rather than to any confirmation or correspondence these may have (no matter how such correspondence or confirmation is defined).

difference of use in Kant depends in part upon a certain inconsistency in Hume with regard to his own atomism.

The sceptical problem of induction is intertwined with the sceptical problem of causation. If we have certain knowledge of causes we can say that if we meet with Cause A in the future we are justified in saying that it will produce Effect B by means of necessary connection.²⁴ And this means that we are reasoning from the past to the future which is the principle of induction. And if our certainty about causation is not unconditionally certain, then our certainty about induction is not certain either, both specifically, i.e., we don't know if A will produce B always, as well as generally, i.e., we don't know if our knowledge as a totality is founded upon a coherent conception of the uniformity of nature. This is exactly parallel to the point that Jonathan Bennett makes concerning causality. According to him, Hume is addressing two rather different questions concerning causality; one, whether it is philosophically necessary; and two, how, in any coherent sense could a necessary causal relationship hold between particulars?²⁵ The crucial sceptical problem seems to be how we can ensure the general certainty about both

²⁴This does not mean that we cannot be mistaken about the connection between A and B, either immediately or at some point in the future. However, in order to make connections and use them predictively, we must not be mistaken about the principle of causal connection--and it is this certainty that the Humean critique denies us.

²⁵Jonathan Bennett, Locke, Berkeley, Hume, (Oxford: the Clarendon Press, 1971), 264.

causation and induction without getting stymied by the question of specific certainty.

The state of general certainty about induction parallels that of the general certainty about causation. In both cases we do not know whether the principle is valid. Specific certainty is not what Hume wishes for; it is precisely what he wants to avoid. Hence his formulation of "Rules By Which To Judge Of Causes And Effects,"²⁶ Not every observation is a causal one as far as Hume is concerned, and it is only through reflecting upon experience and analyzing it that we can determine truly causal connections. Thus the principles put forth in the "Rules" are quite methodological rather than substantial and indeed, one can hardly imagine him wanting to fetter specific matters of fact with an abstract principle of causation that linked any set of facts as causally related, no matter how spurious their connection.²⁷ At the very least, his Newtonian background would have forbidden this.

²⁶David Hume, A Treatise of Human Nature, ed. L.A. Selby-Bigge. Second Edition revised, P.H. Nidditch. (Oxford: At The Clarendon Press, 1978), Bk. One, Part III, sec.XV, p.173.

²⁷In this sense Hume's "proof" of causation is strikingly similar to the role of the reflective judgment and its use of teleology in the Critique of Judgment. For Kant, the use of purposiveness was definitely not a way to impose specific limitations upon nature. We must remain constantly open to whatever it is that nature presents us with. Purposiveness without purpose only guides us in our approach to nature, since the reflective judgment cannot, unlike the determinant judgment, automatically subsume a given fact under a given rule; with the reflective judgment, the rule is not given, hence the tentative nature of its judgments. However, tentative though they are, they are absolutely necessary on a methodological level.

Newton exerted by all accounts a considerable influence upon Hume, at least methodologically. In Hume's Intentions John Passmore refers to Hume's ambition as that of being "the Newton of the moral sciences," and James Noxon draws attention to the title page description of the Treatise, as "Being an attempt to introduce the experimental method of reasoning into moral subjects."²⁸ Newton's four rules of reasoning in philosophy follow the cautious path of scientific enquiry indicated by Bacon. The first is a scientific version of Ockham's Razor; the second concerns the similarity of causes, that is, "to the same natural effects we must, as far as possible, assign the same causes"²⁹ which follows from the

²⁸James Noxon, Hume's Philosophical Development, (Oxford: At The Clarendon Press, 1973), 28. However, for Noxon the relationship to Newton is complicated by what he analyzes as a change in Hume's philosophical intentions, a change shown in his eventual transformation of the enquiry into psychological phenomena of Book II of the Treatise from an "integral part of a philosophical system" (Noxon, 23) into a prelude to a "scientific psychology of the emotions." His argument is based on saying that Hume initially took the problem of knowledge "as one of empirical psychology to be resolved by an adaptation of the experimental method, to which he was reputedly attracted through his admiration for Newton." (Noxon, 6) Eventually, however, his concrete psychological theorizing became separated from his philosophizing, culminating in his own rejection of the work of his youth. This separation, according to Noxon, stems from "the actual logical independence of psychological theory and philosophical analysis." (Noxon, 8) It also stemmed from the methodological influence of Newton and his strictures against hypotheses, a stricture endorsed by Hume, whose later shift in intentions may have been influenced by the abuse of Newtonian method as applied to theology. (Noxon, 32)

²⁹H.S. Thayer, ed. Newton's Philosophy of Nature, Selections from his writings (New York: Hafner Press, 1953), 3.

first rule about not multiplying causes. The third concerns the generalization of knowledge obtained through experiments. The fourth, and for this purpose the most interesting, says that knowledge obtained through induction from phenomena (presumably subject to the previous rules) is to be taken as true "till such time as other phenomena occur by which they may either be made more accurate or liable to exceptions."³⁰ This rule, according to Newton, prevents hypotheses from circumventing legitimate induction.³¹

Hume wants to retain causation as part of any explanation of experience; but, in true Newtonian spirit he does not want it to be a supra-experiential concept that somehow imposes itself upon experience. His task therefore is two-fold: he must show that causality cannot be imposed upon experience necessarily; and, more problematically, he must show how it both arises from experience and explains experience. His treatment of induction is a bit different; he does not seem as concerned with the principle of resemblance between the past and the future in the same way that he is concerned about causation, in part perhaps because the more general principle can be more easily supplanted by an emphasis

³⁰Thayer, ed. Newton's Philosophy of Nature, 5.

³¹The limiting nature of the Fourth rule, which according to Edwin Burtt exercises precedence even over the First rule of Uniformity, seems to be what permeated Hume's intellectual background. Edwin Arthur Burtt, the Metaphysical Foundation of Modern Science (Garden City, N.Y.: 1955; reprint, 2nd. ed., 1932), 218-220.

on natural belief. However, there is a definite link between causation and induction, through that part of causation that Hume terms necessary connexion, and it is the expunging of necessary connection as a relation between objects that forms a necessary step in Hume's critique of induction, although, as will be seen, necessary connection returns in Hume's account of causality as part of our knowledge of objects.

What must also be kept in mind when examining Hume on causality and induction is that he operates on what Gerd Buchdahl distinguishes as two different levels regarding them, one positive and scientific, the other sceptical and epistemological. This is suggested naturally by his rules for reasoning about causes and effects, since only a positive attitude toward causes could justify such rules; and yet it is undeniable that he engages in a relentless critique of causality per se. Buchdahl uses the example of gravity to argue that Hume can accept gravity on a physical and scientific level while refusing to give it a special epistemic status not permitted by his atomism.³² This applies equally to causality which forms a basis for science; the principle of induction, however, is not quite as strongly justified, and is left as a propensity of our psychological structure. Causality, which Hume critiques so strongly in the first part of the Treatise, becomes indispensable to him in the second

³².Gerd Buchdahl, Metaphysics and the Philosophy of Science: The Classical Origins, Descartes to Kant (Oxford: Basil Blackwell, 1969) 327-328.

and third sections, since much of his discussion of emotion and justice depends on causal influences of what he calls our sentiments.

Causality

Hume opens the Treatise with a distinction foundational for his scepticism about causality, the distinction between impressions and ideas, which comprise all the material of the mind. Impressions are lively and forceful, while ideas are "the faint images of these in thinking and reasoning".³³ These are further distinguished into simple and complex impressions and ideas, simple ones being "such as admit of no distinction nor separation";³⁴ and simple ideas are derived from simple impressions.³⁵ In this empiricist account of experience Hume is obviously drawing upon his predecessors, Locke and Berkeley, although he distinguishes impressions and ideas whereas Locke lumped these together as ideas.

Hume also distinguishes impressions of Sensation and Reflexion, the former arising in us from unknown causes, while the latter arise from our ideas, insofar as they reverberate upon our minds and, in so returning us to a former impression, create a new one, say, of hope or fear or desire, a topic Hume

³³Hume, Treatise, 1.

³⁴Ibid., 2.

³⁵Ibid., 4.

explores at great length in Book Two of the Treatise when he analyzes the "passions." The sensation/reflection distinction becomes important for causality because it is in impressions of reflection that Hume finally locates a causality that is legitimate on his atomistic terms.

When an impression affects us and leaves its traces in an idea, this idea may be extraordinarily lively, in which case memory is at work, or, it may cease to be lively and become a "perfect idea," in which case the faculty of imagination is operative. However, the most important difference for causality between imagination and memory lies not in the vivacity of the latter and the "faint and languid" aspect of the former, but in the imagination's flexibility re its raw material:

There is another difference betwixt these two kinds of ideas, which is no less evident, namely that tho' neither the ideas of the memory nor imagination, neither the lively nor faint ideas can make their appearance in the mind, unless their correspondent impressions have gone before to prepare the way for them, yet the imagination is not restrain'd to the same order and form with the original impressions; while the memory is in a manner ty'd down in that respect, without any power of variation.³⁶

Re causality it is not variation per se which is so vital, but the conjoining and separation of ideas that is the peculiar prerogative of imagination, for this activity has its principles, for otherwise "chance alone wou'd join them".³⁷

³⁶Ibid., 9.

³⁷Ibid., 10.

These principles are resemblance, contiguity, and cause and effect.

When Hume later turns to the question of knowledge, he returns to cause and effect, placing it with identity and relations of time and place as the three relations which refer to objects and changes (or not) in them, rather than to the comparison and analysis of ideas as in, say, mathematics.³⁸ In the Enquiry he puts the case very succinctly, dividing the objects of reason into relations of ideas, such as mathematics, and matters of fact.³⁹ Of the three relations that deal with objects, causation, according to Hume, is "the only one, that can be trac'd beyond our senses, and informs us of existences and objects, which we do not see or feel".⁴⁰ Thus all "reasonings concerning matter of fact seem to be founded on the relation of Cause and Effect."⁴¹

Although there are many problematic aspects of Hume's account of causality, I will focus on the problem of necessary connection. Hume divides causality into three parts, succession, contiguity and necessary connection; although the first two do not lack controversy,⁴² the third not only leads

³⁸Ibid., 69.

³⁹Hume, Enquiry, 25.

⁴⁰Hume, Treatise, 74.

⁴¹Hume, Enquiry, 26.

⁴²A.J. Ayer discusses some of the problems that contiguity and succession pose for Hume's account of causation in Hume, 58-59, as do Tom Beauchamp and Alexander Rosenberg in their

into the problem of induction but was considered by Hume to be the most important component of causation:⁴³

Shall we then rest contented with these two relations of contiguity and succession, as affording a compleat idea of causation? By no means. An object may be contiguous and prior to another, without being consider'd as its cause. There is a NECESSARY CONNEXION to be taken into consideration; and that relation is of much greater importance, than any of the other two above-mention'd.⁴⁴

This necessary connection, however, is not readily apparent when one examines any sequence of events, taken solely as a sequence of events. What is apparent is the related phenomenon of constant conjunction:

We remember to have had frequent instances of the existence of one species of object; and also remember, that the individuals of another species of objects have always attended them, and have existed in a regular order of contiguity and succession with regard to them. Thus we remember to have seen that species of object we call flame, and to have felt that species of sensation we call heat. We likewise call to mind their constant conjunction in all past instances. Without any farther ceremony, we call the one cause

chapter on "Contiguity and Succession." Tom Beauchamp and Alexander Rosenberg, Hume and the Problem of Causation (New York; Oxford: Oxford University Press, 1981).

⁴³According to Alan Schwerin, necessary connection is not only the central component of causality, but it functions as the most important theme of the Treatise. He bases his claim upon references to this in the Abstract of the Treatise and its title page, as well as upon an argument showing that the relationship of ideas to impressions in Hume may well stand or fall by Hume's search for the impression of necessary connection. See Alan Schwerin, The Reluctant Revolutionary. An Essay on David Hume's Account of Necessary Connection, American University Studies (New York: Peter Lang 1989), 2-7 & 9-16.

⁴⁴Hume, Treatise, 77.

and the other effect, and infer the existence of the one from that of the other.⁴⁵

Is constant conjunction then to be a substitute for the idea of necessary connection? This does not appear to be a plausible solution. If Hume were to say that when we speak of necessary connection we speak in truth of constant conjunction, then he would surely be interpreting language artificially. If, on the other hand, he is saying that necessary connection is, ontologically speaking, nothing but constant conjunction, then he has to explain 1) how one can be reduced to the other and 2) why he needs then to bring in necessary connection at all. In fact, Hume manages to preserve the "flavour" of necessary connection while showing how it arises from constant conjunction.

That he can do so no doubt stems from the fact that, as certain commentators have pointed out, there are really two tasks that Hume must accomplish: he must give a coherent account of constant conjunction as the basis of causality; and he must account for our belief in this basis and the continuity of such a belief, a task that resolves itself into an account of our subjective notion of necessary connection and which leads into the problem of induction.

Beauchamp and Rosenberg, for example, make an interesting distinction between causation as a part of the

⁴⁵Hume, Treatise, 87.

described world and causation as it figures in our judgments and explanations.⁴⁶ This distinction permits them to accept Humean causality as a mind-independent constituent of the world, while relegating necessary connection to the subjective constraints of our minds. James Noxon also distinguishes between Hume the philosophical analyst and Hume the psychologist; constant conjunction belongs to the former, necessary connection to the latter.⁴⁷

In what fashion does such a subjective notion arise from what objectively seems nothing more than constant conjunction? Hume begins by considering the process of observation of similar instances and finds that,

...there is nothing in a number of instances, different from every single instance, which is supposed to be exactly similar; except only, that after a repetition of similar instances, the mind is carried by habit, upon the appearance of one event, to expect its usual attendant, and to believe that it will exist. This connexion, therefore, which we feel in the mind, this customary transition of the imagination from one object to its usual attendant, is the sentiment or impression from which we form the idea of power or necessary connexion.⁴⁸

Here then is the impression that validates our notion of necessary connection. It is not an impression of sensation but of reflection,⁴⁹ and it is one that is itself caused by

⁴⁶Beauchamp and Rosenberg, passim, but especially 260-261.

⁴⁷Noxon, 132 & 135-136.

⁴⁸Hume, Enquiry, 75.

⁴⁹Hume uses the term "sentiment" in the Enquiry to describe this and other kinds of impressions that we find when turning our perceptions within.

that constant conjunction of constant conjunctions with our observation. Therefore, "When we say, ..., that one object is connected with another, we mean only that they have acquired a connexion in our thought, and give rise to this inference, by which they become proofs of each other's existence."⁵⁰

The main point is that necessary connection by this means ceases to be part of any object and instead becomes a part of our knowledge of the object. As Kemp Smith points out:

There is no sufficient alteration in the evidence before the observer, but there is an all-important alteration in the attitude of the observer; and this in turn is due to the fact that qua observer he is present to all the instances, a fact which allows of their having a cumulative effect (itself an instance of causal agency) - namely, that of generating a 'custom or habit' whereby the mind is led, upon the occurrence of a perception resembling the antecedents, to frame an idea resembling the consequents.... The 'custom or habit', once generated, itself in turn so acts upon the mind, i.e. upon the observer of the repeated sequences, that there is generated - so Hume declares - a feeling or sentiment, the feeling which he describes as that of being determined, that is to say, necessitated, in the transition.⁵¹

But does such a psychological feeling of necessity provide a secure basis for causal reasoning? In a recent work on necessary connection in Hume, Alan Schwerin contends that it is not actually the feeling as such which constitutes necessary connection. He makes an interesting distinction between Hume's search for the origin of the idea of necessary

⁵⁰Hume, Enquiry, 76.

⁵¹Kemp Smith, Hume, 92-93.

connection and his defining of what necessary connection actually is.⁵² For Schwerin, necessary connection needs to be validated by what he terms the "priority principle," which is simply Hume's principle that any idea be traced back to its corresponding impression.⁵³ The impression for the idea of necessary connection turns out to be the very inclination and determination to pass from the appearance of one object to the idea of another (on the basis of constant conjunction).⁵⁴ This "weak" thesis (so named by Schwerin) is then followed by a much more radical idea, namely, that necessary connection itself (not its idea) is nothing more or less than the aforementioned subjective determination of the mind, i.e., that it is "a subjective internal phenomenon". The passage he quotes from Hume that seems to strongly favour this interpretation is as follows:

Several instances of resembling conjunctions leads us into the notion of power and necessity. These instances are in themselves totally distinct from each other, and have no union but in the mind, which observes them, and collects their ideas. Necessity, then, is the effect of this observation, and is nothing but an internal impression of the mind, or a

⁵²Schwerin, 29.

⁵³Michael Williams calls it the "copy principle" and suggests, in fact, that Hume's scepticism rests not so much upon any problems with this, but upon "something Hume takes over from Berkeley: the claim that there cannot be genuinely abstract ideas." Michael Williams, "Hume's Criterion of Significance," Canadian Journal of Philosophy, Vol.15, Number 2, (June, 1985): 278.

⁵⁴Schwerin, 31.

determination to carry our thought from one object to another.⁵⁵

If this is so, however, does it not undercut the epistemic usefulness of necessary connection and thereby, causation? Michael Williams sums up this possible criticism as "the claim that Hume advances a 'genetic' thesis where an 'analytic' thesis is required: he treats an officially a posteriori theory about the origins of ideas as if it were an a priori criterion of significance."⁵⁶ He himself disagrees with this position, basing part of his critique of this criticism upon a distinction between theoretical scepticism and practical scepticism:

To be a theoretical sceptic is to hold the sceptical thesis that, in the area under consideration, no beliefs can be justified to be theoretically correct. To be a practical sceptic is to take a further step and to hold that the theoretical correctness of scepticism demands practical action: in particular, suspension of belief wherever justification is not to be had. Hume's name for practical scepticism is 'Pyrrhonism' and the crucial point about Hume's own scepticism is that it is anti-Pyrrhonist. Hume's general epistemological scepticism is purely theoretical.⁵⁷

⁵⁵Hume, Treatise, 165.

⁵⁶Williams, 275.

⁵⁷Williams, 278. However, John P. Wright, while in general agreement with this (he himself refers to Hume's academic scepticism), nevertheless points out that Hume does accept at least one of what Wright characterizes as the three main points of Pyrrhonic scepticism, namely, the discrepancy between appearances and judgments. However, he does say that Hume does not accept the two others, suspension of judgment and tranquility, being, in fact, particularly opposed to the second. See Wright, 411-421.

Arguments like these appear to be in the same camp as those that would stress the positive aspects of Hume's thinking, while playing down the deconstructing force of his scepticism. Yet these arguments, while doing justice to Hume's theory of natural belief and the second and third books of the Treatise, also overlook the point that even a theoretical scepticism can be fatal, when its cutting edge is applied to an equally theoretical area, such as experiential knowledge. True, Hume is a theoretical sceptic, but this is not for epistemic reasons; it is because of his faith in nature, because of his naturalism. The problem with his naturalistic approach becomes evident when a more general epistemic question such as induction is addressed.

One interesting and significant point about Hume's approach to the problem of causality is that he goes from a universe of impressions and ideas to one of objects between which no objective necessary connection holds. These objects, on his own analysis, are presumably composed of atomic impressions, even when they are such fabled entities as golden mountains, and when we have an impression of a large object, such as a house, it can be broken down into a conglomerate of simple impressions. Our ideas receive support from their corresponding impressions, and these in turn are built up out of simple ones.

What is it that causes, for lack of a better word, these conglomerations of sensations that are perceived by us as

objects? In Humean terms, it would be experience, plain and simple. Is it experience, then, that enables us to distinguish between, say, events and objects? It would seem so initially. One distinguishes a ship sailing downstream as an event from a house as an object because experience informs us that the one is fleeting and the other stable.

However, on Hume's impressionistic terms, there is really nothing about the experience of a ship sailing downstream and a house that would fundamentally distinguish the two. They are both complex impressions but what presumably distinguishes the house is the recurrence of its being perceived, and yet this recurrence needs to be recognized as a recurrence, not as a perception of something new. What underlies such recognition is not clear, although presumably it is the recognition of resemblance between perceptions. The mechanism of such recognition, which cannot be wholly explained by experience, needs some stronger justification. It would have to be a justification of causality at a very weak but crucial level, through necessary connection, but not, if truly answering Hume, a necessary connection based on anything he has flatly ruled out.

Such a justification would therefore have to steer a careful path between claims refutable by reference to experience and claims based solely on ideas, since Hume annihilates the former by showing that such claims overstep

the perception-bound limits he has set for ideas⁵⁸ and disposes of the latter by showing that they are based on definitions that assume causality as a hidden premise.⁵⁹

As well, no claim about necessary connection can be made at what I will call the object level, for there one is already dealing with matters of fact, between which necessary connection is a causally engendered subjective propensity acquired by exposure to constant conjunction. What, however, of the propensities that underlie the construction of objects and events in the first place? Does causality have a role to play here? Hume invokes cause and effect as the basis of our ascribing continued identity to an object when we are not in its presence temporarily, but there are strong grounds, on his own assumptions, for invoking cause and effect as a basis for the continued identity of an object in our presence, since what "being in my presence" really involves is my reception of a complex of sensations that I assume is the same from moment to moment. What either the basis of that assumption or its mechanism is, is not clear on a Humean account.

Induction

⁵⁸Hume, Enquiry, 63-74.

⁵⁹Hume, Treatise, 80-82.

In The Central Questions of Philosophy A.J. Ayer outlines the problem of induction in contemporary if somewhat pragmatic terms:

I said a moment ago that we hold fast to our theories because we find that they work. But even on the assumption that we are entitled to accept historical testimony, at least when it represents a large measure of agreement, the most that we can claim is that our theories have been found to work in the past. What assurance does this give us that they will continue to work in the future?⁶⁰

Both his formulation of the problem and his response to it are situated in the context of Hume's scepticism.⁶¹

Although Hume's sceptical critique is bound up with his critique of causality, Ayer prefers to discuss the problem of induction as the problem of inference beyond immediate experience. This is because, as he points out, the latter encompasses more than "what would ordinarily be counted as a

⁶⁰Ayer, The Central Questions of Philosophy, 138.

⁶¹Farhang Zabeeh disputes whether, in fact, the problem of induction is not a twentieth-century obsession foisted upon Hume, although bolstered by Hume's creation of a pseudo-problem; pseudo, because in the end it is not a problem for him. According to Zabeeh, Hume accepts induction on three levels: the animalistic, the psychological, and the scientific. What Hume does say is that induction cannot be justified a priori, but that this is not a problem within the framework of natural belief. However, this interpretation seems to downplay massively the scepticism of Hume's philosophy, an approach which, whatever its merits (like Kemp Smith's) in stressing Hume's positive side, is hardly conducive to an analysis of his thinking as a propaedeutic to Kant's. In any case, Zabeeh does not dispute Kant's perception of Hume as having a problem of induction; he includes Kant in a list of philosophers taken up with this problem. Farhang Zabeeh. "Hume's Problem of Induction: An Appraisal," in Hume. A Re-evaluation, ed. Donald W. Livingston and James T. King (New York: Fordham University Press, 1976), 80 & 84-87.

causal relation."⁶² Nevertheless, he starts from the fundamentals of Hume's arguments against causation in order to reach the cutting edge of the argument against induction, and in doing so clearly brings out the relationship between necessary connection and the problem of inductive reasoning.

He condenses Hume's argument into three vital steps:

1. There is no logically necessary relationship between the existence of a given cause or the existence of a given effect, i.e., there is no logically necessary relationship between any two events.
2. There is no other kind of necessary relationship that could hold between two events.
3. And therefore, we cannot reason from the existence of one event to the existence of another event except insofar as we are psychologically inclined to do so; such inclination depending itself causally upon the constant conjunction of these events in the past, and, more generally, upon our belief that the future will resemble the past.

Thus our epistemic faith in causality depends both on the causally induced passing from one object to another that was seen previously in the discussion of causality and on a belief that functions as a principle of induction, a principle

⁶²Ibid.

that sanctions our connecting past and future. Since such a belief is not based upon any logical evidence as such, our knowledge is dependent upon something that is itself a contingent belief, since it is not logically impossible that the future will cease to resemble the past. This is the crux of the argument against induction; if induction involves generalization from experience which allows us to formulate causal laws, how can we ever be sure that our generalizations will hold good in the future? We cannot, says Hume, but this does not prevent us from engaging in such generalization; it only deprives us of rational pretensions when we do so.

The problem with addressing Hume on this question is that the nature of the problem of induction is bound up with relations between matters of fact so that even formulating a problem that can be answered independently of experience risks becoming a trivial or meaningless enterprise. With causality one could contend that the problem lies in rebutting Hume's atomism by showing some basic connection between our sensations that would serve in lieu of a more sophisticated connection between full-fledged matters of fact. Since it concerns claims to knowledge, the principle of induction cannot be reduced to this kind of basic connection, since, as the functioning of lower animals would seem to indicate, knowledge is not, on the face of it, indispensable for experience.

Therefore, a solution to the problem of knowledge would have to take its stand on the indispensability of the principle of induction for knowledge, especially scientific knowledge. There are three problems with such an approach. One is that it is not at all clear that scientists either need or use such a principle, although it may well be a hidden assumption of their work. As an assumption, hidden or otherwise, it is not clear what such a principle contributes to scientific knowledge, except perhaps some psychological sense of the scientist's work. This is the second problem and it is one that Ayer, as will be seen, is concerned with. The third problem is that it is extremely unclear as to what a Kantian solution to this problem could provide that a Humean solution has not; the "belief" status accorded the principle of induction by Hume is essentially an embryonic heuristic status.

Ayer not only agrees with Hume concerning natural necessity and induction, but, with reference to the second problem already outlined, does not even see the need for the inductive principle:

If on the basis of the fact that all the A's hitherto observed have been B's, we are seeking for an assurance that the next A we come upon will be a B, the knowledge, if we could have it, that all A's are B's would be quite sufficient; to strengthen the premiss by saying that they not only are but must be B's adds nothing to the validity of the inference.⁶³

⁶³Ibid., 149.

This is quite true - after the fact as it were. Once we have made the inference from A to B and have confirmed it, we need no compelling "A must be B" premiss. However, it is in its predictive capacity that the inference is problematic. How could we possibly know that all A's are B's, since this would seem to require the problematic assumption that we have available all members of class A to inspect. In the absence of such availability, we need a principle that will allow us to say that, based on whatever laws we can appeal to, all A's must be B's.

Of course, this need not mean that we could not be wrong. We simply need a framework within which to be right or wrong. Ayer, however, thinks that Hume's appeal to the uniformity of nature is somewhat puzzling. Either, he says, the principle functions as a major premise in any proposition about the world,⁶⁴ or it becomes totally nebulous. It will become clear that what Ayer considers nebulous is in fact the general certainty about inductive reasoning referred to previously.⁶⁵ He goes on to state that in the former case it becomes absurd to use a principle that cannot obviously be used to validate any given specific claim, while in the latter case, the principle serves no purpose:

The uniformity of nature is not so rigidly conceived as to be at the mercy of an exception to what has so

⁶⁴A problem similar to that concerning specific causation. See above, 18.

⁶⁵See above, 18.

far seemed to be a generalization. On the other hand, we do not want to conceive it so elastically that it becomes consistent with anything whatsoever; for then it cannot authorize us to expect any one thing to happen rather than any other. What we want is a backing for just those hypotheses that we are actually disposed to project. But where are we to find a general principle that will secure this for us?⁶⁶

I think that Ayer has misunderstood the function of the uniformity of nature. He is obviously correct in saying that it cannot be used to support specific conclusions; however, there seems as well to be no good reason for any general epistemological principle to support "just those hypotheses that we are actually disposed to project". Be that as it may, even if there is no direct relationship between the principle that the future will resemble the past and any given law or even set of laws, one can certainly suppose there might be a relationship between the totality of our knowledge, simply considered as knowledge, and this inductive principle. Hume, at least, thinks there is one:

For all inferences from experience suppose, as their foundation, that the future will resemble the past, and that similar powers will be conjoined with similar sensible qualities. If there be any suspicion that the course of nature may change, and that the past may be no rule for the future, all experience becomes useless, and can give rise to no inference or conclusion.⁶⁷

In fact, as was pointed out before, the principle of induction functions as a motif in the project of knowledge and as at

⁶⁶Ayer, The Central Questions of Philosophy, 162.

⁶⁷Hume, Enquiry, 38.

least one of the parameters within which such a project takes place. In spite of this central role, Hume himself does not see any possibility of validating the principle within the parameters he has set up, namely, that of relations of ideas and matters of fact. For the inductive principle is not simply a relation of ideas, since it makes a claim about the sphere of experience. Neither, however, is it a matter of fact, since all matters of fact take place within the parameters of the principle, and, in any case, if it were a matter of fact, such a principle would be contingent and thus defeat its purpose. Thus, concludes Hume:

It is impossible, therefore, that any argument from experience can prove this resemblance of the past to the future; since all these arguments are founded on the supposition of that resemblance. Let the course of things be allowed hitherto ever so regular; that alone, without some new argument or inference, proves not that, for the future, it will continue so.⁶⁸

What this suggests is that Hume hit upon a concept that, while indispensable for knowledge, is not susceptible of validation within the parameters that he had hitherto developed. This seems to be Kant's view as well. He says that Hume saw the problem but thought it not susceptible of resolution:

For how is it possible, says that acute man [i.e. Hume], that when a concept is given me I can go beyond it and connect with it another which is not contained in it, in such a manner as if the latter necessarily belonged to the former? Nothing but experience can furnish us with such connections (thus he concluded from the difficulty which he took to be impossibility), and all that vaunted necessity or, what is the same thing, knowledge assumed to be a

⁶⁸Hume, Enquiry, 38.

priori is nothing but a long habit of accepting something as true, and hence of mistaking subjective necessity for objective.⁶⁹

What Kant opposes to this derivation of necessary connections from experience is "a completely reversed mode of connection which never occurred to Hume - they do not derive from experience, but experience derives from them,"⁷⁰ an idea that not only never occurred to Hume, but which would no doubt have received from him the well-known treatment he suggests for books of school or divinity metaphysics at the close of the Enquiry. The same type of solution must apply to knowledge, then. The principle of induction, the principle that the future will resemble the past, a principle that says, in essence, that knowledge is systematic, is a principle that must be shown to be constitutive of knowledge; it cannot be a merely heuristic principle, because this is the level at which Hume has it, and at this level it is still vulnerable to sceptical attack. What this entails, in part, is an explanation of how one can meaningfully talk of knowledge being constituted in such a general sense without either lapsing into triviality or being so firmly committed to certain beliefs that one daily fears, say, the discovery of

⁶⁹Immanuel Kant, Prolegomena to Any Future Metaphysics, trans. Paul Carus, Revised with intro. Lewis White Beck (The Liberal Arts Press, 1950), 24-25.

⁷⁰Kant, Prolegomena, 60.

black swans in Australia,⁷¹ the latter course, however, being inaccessible on Humean grounds, since matters of fact are never immutable.

Although Kant responds to these problems in Hume from a standpoint that is radically different from Hume's in many ways, it is very tempting occasionally to assimilate the latter's views to the former's, and vice versa, to some extent.⁷² After all, Hume says that causation is thought through necessary connection for us, since constant conjunction leads to the generation of necessary connection in our minds. He says that the principle that the future resembles the past is one upon which all reasoning from experience must rest. He says that the former principle of necessary connection only has subjective, though necessary, validation and that the latter, the basic principle of induction, is not valid through demonstrative reasoning nor can it be supported through experience without circularity.

⁷¹I do not mean to imply that most scientific theories are in essence like the assertion that "all swans are white"; rather, I mean to highlight the obvious but dangerous way in which the principle of induction could be justified, namely, by appealing to the timeless nature of our scientific theories. This course, however, is ruled out by Hume.

⁷²Beck argues convincingly that Kant's view of Hume is so coloured by Beattie's presentation of the latter, that Beattie "may have misled Kant into thinking that there was an argument to which he needed to reply, not just an 'opinion'", on the question of causality, whereas "Hume's implicit account of the causal principle is much more like Kant's own than Kant had any reason to suspect." Beck, 120.

However, he does not say, as Kant would, that therefore necessary connection is an inescapable constituent of the causal sequence and one which shapes experience for us; as well, unlike Kant, he does not, from the fact that the principle of induction falls neither into deductive nor into experiential reasoning conclude that it falls into another species of reasoning altogether. Instead, he concludes that reason itself must be at fault and falls back on the notion of "natural belief," effectively imprisoning his new wine in old bottles.

The actual role that natural belief plays, one in which we are compelled by the force of nature to use concepts not justifiable by reason, is not itself an implausible one, since it fills a gap between logic and experience. However, the most serious flaw in such a position is that one cannot fully articulate just why it is that we must act in accordance with nature. Of course Hume would point out that it is not a question of deciding to act in accord with nature; we just do.

Thus the sceptic still continues to reason and believe, even tho' he asserts, that he cannot defend his reason by reason....Nature has not left this to his choice, and has doubtless esteem'd it an affair of too great importance to be trusted to our uncertain reasonings and speculations.⁷³

Nevertheless, even if such a position works in morality or psychology, where Hume can ground his position upon a theory

⁷³Hume, Treatise, 187.

of pleasure and pain, it is not easy to see how it stands up concerning an enterprise such as that of scientific knowledge, where such concepts of reason play such a central role. As Hume himself points out "If there be any suspicion that the course of nature may change, and that the past may be no rule for the future, all experience becomes useless, and can give rise to no inference or conclusion." Where an argument is grounded upon experience there can always be suspicion (whether we act upon it or not), since experience cannot guarantee the argument's infallibility. Hence if one does not want to accept Hume's conclusion but does accept his reasoning, a kind of impasse arises, which, according to Hume, can only be broken by the force of nature.

Thus, Kant's attempt to cast something much more definite and foundational than natural belief in this synthesizing role, must obviously either transcend or transform the parameters that Hume stays within, while addressing the problems that arise from these. One parameter significant for causality is Hume's atomism at the level of sensation; it is also significant for the problem of induction at the level of perceiving objects and making knowledge-claims about them. Thus Kant's response to Hume, though two-tiered insofar as both causality and induction are addressed, is unified in a search for "necessary" connections that neither violates the distinctions Hume has made between relations of ideas and matters of fact, a distinction that Kant reproduces

in different language, nor remains satisfied with leaving those connections invisible under the cloak of nature.

CHAPTER TWO

AN OUTLINE OF THE TRANSCENDENTAL PROJECT

In the Critique of Pure Reason Kant sets out his solution to the sceptical problem of Hume, a solution designed to address the state of metaphysics, suspended between dogmatism on the one hand, and scepticism on the other.

The Critique is divided into two parts: a Transcendental Doctrine of Elements and a Transcendental Doctrine of Method. The first part, which will be the subject of this discussion, is divided into three main parts: the Transcendental Aesthetic, the Transcendental Analytic, and the Transcendental Dialectic. The Aesthetic concerns space and time,⁷⁴ the Analytic concerns the legitimate use of the categories, and the Dialectic concerns the illegitimate and illusory extension of these beyond the realm of possible experience. The argumentation in which each of these sections is rooted

⁷⁴Kant discusses in a footnote the current use of "aesthetic" as part of a rational discussion of taste and thinks such a usage "inadvisable" owing to the dependency of taste upon empirical principles which makes such an endeavour "fruitless." His views as to both usage and the actual endeavour obviously changed by the time he wrote the Critique of Judgment, a change, however, that was anticipated by his recommendation that the name either be used for a doctrine of sensibility or be shared "with speculative philosophy, employing it partly in the transcendental and partly in the psychological sense." (A 21; B 36)

depends upon an initial paradigmatic shift that Kant explicitly likens to the method of Copernicus:

Failing of satisfactory progress in explaining the movements of the heavenly bodies on the supposition that they all revolved round the spectator, he [Copernicus] tried whether he might not have better success if he made the spectator to revolve and the stars to remain at rest. (B xvi-xvii)

The Copernican Revolution

The "Copernican revolution" forms the axis of Kant's architectonic. Without it he could not have designated space and time as the pure intuitions which are the pre-condition for our experience of anything whatsoever; neither could he have made a transcendental deduction of the categories. It is the central and distinctive axiom of the Kantian system, one that Kant postulates because of the failure of the opposite axiom, i.e., that our ideas must conform to things. This notion, says Kant, has only led to scepticism concerning knowledge; by default almost, the other axiom ought to be tried.

The kind of scepticism that the previously held axiom leads to has been outlined in the previous chapter. Hume's scepticism is successful because of a gap between ourselves and reality which cannot be successfully bridged by concepts attempting to know that reality. However, although Hume's scepticism results from denying that our concepts can successfully reach reality, thus placing him squarely against

a thinker like Descartes, he and the other empiricists share with the rationalists a blind spot with regard to consciousness. As Kemp Smith points out:

Descartes and his successors virtually assume that consciousness is an ultimate, unanalysable form of awareness, and that all that can reasonably be demanded of the philosopher is that he explain what objects are actually presented to it, and under what conditions their presentation can occur. On Descartes' view they are conditioned by antecedent physical and physiological processes; according to Berkeley they are due to the creative activity of a Divine Being; according to Hume nothing whatsoever can be determined as to their originating causes. But all three fail to recognise that even granting the objects to be of the character asserted, namely mental, the further problem still remains for consideration, how they come to be consciously apprehended, and in what such awareness consists. (emphasis added)⁷⁵

Ernst Cassirer also points out that "Empiricism and rationalism are distinguished by their intuitions about the specific cognitive means by which we assimilate being, but the fundamental view that there is such being, that there actually is a reality of things which the mind has to take into itself and copy, is common to both."⁷⁶ It is this fundamental view that Kant's transcendental idealism subverts. From a rather different point of view, Gordon Brittan sees both rationalism and empiricism as essentially reductionist in attitude, the one in favour of basic a priori principles and the other in

⁷⁵Norman Kemp Smith, A Commentary To Kant's 'Critique of Pure Reason', 2nd. ed. (London: Macmillan & Co., 1923), xl.

⁷⁶Ernst Cassirer, Kant's Life and Thought, trans. James Haden, intro. Stephen Körner (New Haven and London: Yale University Press, 1981; trans. from 2nd. German ed., 1921), 145.

favour of basic sense-experience; his contention is that Kant (particularly in the Copernican revolution) is essentially anti-reductionist.⁷⁷

Transcendental Idealism

Kant's achievement, therefore, is the consideration of what it means to be aware or conscious of something, and, furthermore, what knowledge of something means. In his Copernican revolution he rejects the previously held assumption that knowledge of an object is fundamentally dependent upon the object and puts forth the opposite view:

Hitherto it has been assumed that all our knowledge must conform to objects. But all attempts to extend our knowledge of objects by establishing something in regard to them a priori, by means of concepts, have, on this assumption, ended in failure. We must therefore make trial whether we may not have more success in the tasks of metaphysics, if we suppose that objects must conform to our knowledge. (B xvi)

This paradigmatic shift underlies every aspect of the Critique, and also forms the basis of Kant's later explorations of morality, aesthetics, and scientific judgment. Nevertheless, the transcendental idealism entailed by this shift has often been de-emphasized by commentators who wish "to locate in the Critique a philosophical core that can be

⁷⁷Gordon. G. Brittan, Kant's Theory of Science, (Princeton, New Jersey: Princeton University Press, 1978) 3-13. Brittan suggests that it was their perception of the epistemological insecurity of physics (and Kant's lack of the same) that lay at the back of both rationalist and empiricist reduction.

neatly separated from the idealistic trappings".⁷⁸ This approach has its source in what Henry Allison calls the "standard picture" of Kant:

According to the standard picture, Kant's transcendental idealism is a metaphysical theory that affirms the unknowability of the "real" (things in themselves) and relegates knowledge to the purely subjective realm of representations (appearances). It combines a phenomenalist account of what is actually experienced by the mind, and therefore knowable, with the postulation of an additional set of entities which, in terms of the very theory, are unknowable.⁷⁹

What then follows is an attempt to free the analytically sound kernel of the Critique from its metaphysical shell. This criticism of Allison's is chiefly directed against the influential view of P.F. Strawson.

Transcendental idealism is given a clear-cut definition by Kant in the Transcendental Dialectic, in the Fourth Paralogism which concerns ideality. (A 369) In general terms, as Ernst Cassirer has pointed out, the notion "transcendental" can only be applied to the deduction of concepts necessary for the possibility of knowledge or freedom, and not to the concepts themselves independently of the deduction:

We see that the concepts of magnitude and number, of permanence or causality, can equally little be designated as transcendental concepts in the strict

⁷⁸Henry Allison, Kant's Transcendental Idealism (New Haven: Yale University Press, 1983), 6.

⁷⁹Allison, Kant's Transcendental Idealism, 3-4. Graham Bird, twenty-one years earlier, also took issue with the widespread phenomenalist interpretation of Kant, particularly as regards his account of perception. See Bird, Kant's Theory of Knowledge (New York: Humanities Press 1973; reprint, 1962), *passim*, but especially 1-17 & 52-64.

sense; this designation, on the contrary, properly belongs only to that theory showing us how the possibility of all knowledge of nature rests on these concepts as necessary conditions. Even the idea of freedom, taken in itself, cannot be called transcendental. This title must be reserved for the knowledge that the special quality of the consciousness of duty, and therefore the entire structure of the realm of the ought, is founded on the datum of freedom, and for the knowledge of how it is so founded.⁸⁰

Thus, transcendentality seems to deal purely with the possibility of knowledge. The actual concepts it deals with can only be transcendental in a loose sense, insofar as they are the principles of the possibility of experience.⁸¹

Synthesis A Priori

The concept of the synthetic a priori is central to Kant's argumentation. However, he does not really ask whether it exists, but only how it is possible. The distinction is important since Kant bases his philosophical venture upon the necessity of proving propositions that he already considers existent, with the significant exception of metaphysics. This may be an Achilles heel in his architectonic but, at least as far as refuting Hume goes, it is a relatively legitimate procedure; after all, the essence of what a synthetic

⁸⁰Ernst Cassirer, 151.

⁸¹In fact, this looser sense of transcendentality will be used when talking about the principle of systematicity as well. This, however, will be a principle of the possibility of knowledge.

proposition a priori is, resembles very closely the general form of a Humean conception of causality, i.e., going beyond what is given to us in objects to connect them causally (synthesis), while such connecting does not appear to be from experience (a priori). Of course Hume does try to make causality dependent upon experience in the final analysis, so in another sense, although both Kant and Hume agree that this type of proposition exists, in the end Kant wants to show that it is indeed a priori while Hume wants to show that it is not.

Kant begins by giving fairly precise definitions of key terms such as "a priori" and "synthetic." He defines a priori knowledge as knowledge independent of experience, and, most importantly, independent of all experience. "In what follows... we shall understand by a priori knowledge, not knowledge independent of this or that experience, but knowledge absolutely independent of all experience." (B 2-3) This is in order to avoid claims that one might think of as "a priori " in daily life:

Thus we would say of a man who undermined the foundations of his house, that he might have known a priori that it would fall, that is, that he need not have waited for the experience of its actual falling. But still he could not know this completely a priori. For he had first to learn through experience that bodies are heavy, and therefore fall when their supports are withdrawn. (B 2)

a posteriori knowledge, on the other hand, is derived from experience, and all knowledge which has a posteriori sources is dubbed empirical by Kant.

He then defines analytic propositions as those where the predicate is contained within the concept of the subject and is drawn out by analysis; synthetic propositions are defined as those where the predicate is attached to the subject through synthesis and where the predicate is not fully contained in the concept of the subject. For obvious reasons Kant calls analytic judgments explicative and synthetic ones ampliative. However, a basis is needed for the connection of the predicate with the concept of the subject in the latter judgments:

In synthetic judgments I must have besides the concept of the subject something else (X), upon which the understanding may rely, if it is to know that a predicate, not contained in this concept, nevertheless belongs to it. (A 8)

Empirical synthetic judgments, i.e., synthetic a posteriori judgments as opposed to synthetic a priori judgments, are unproblematic in this respect. In their case experience itself provides the basis for the synthesis. "This X is the complete experience of the object which I think through the concept A - a concept which forms only one part of this experience" (A 8), and to which can be added other "parts" obtainable through the self-same experience. For example, through experience the predicate of weight can always be added to the concept of body.

If empirical judgments are unproblematic the same cannot be said about judgments of synthesis that are independent of experience. Causality, for example, is postulated as "every

event has a cause," which, as Hume had already pointed out after his own fashion, goes beyond the conception of an event to try to necessarily connect it to another event, and hence to the notion of causation. Such a synthetic judgment a priori needs a valid basis:

What is here the unknown = X which gives support to the understanding when it believes that it can discover outside the concept A a predicate B foreign to this concept, which it yet at the same time considers to be connected with it? It cannot be experience, because the suggested principle has connected the second representation with the first, not only with greater universality, but also with the character of necessity, and therefore completely a priori and on the basis of mere concepts. (A 9; B 13)

The last reference to the basis of "mere concepts" is not really accurate, however, since it implies purely inter-conceptual necessity and hence, analyticity, whereas Kant is actually going to show that the basis reaches well beyond the conceptual level. Also, the idea that synthesis a priori is completely independent of experience is a bit misleading. It is independent of experience, insofar as experience is taken as the totality of specific experience; a synthetic judgment a priori is independent, if you like, of all this-or-that experiences. Nevertheless, the validity of synthesis a priori will be shown by Kant to be dependent upon experience in general, or rather, the possibility of experience in general.

Brittan renders the notion of synthesis a priori (as well as the notions of analytic statements and synthesis a posteriori) very clear by placing it in the context of a

Leibnizian structure of possible, real, and really possible worlds. He assigns analytic statements to the first class of worlds, which is the all-encompassing class of worlds, and synthetic a posteriori statements to the actual, real world. Synthetic a priori statements, however, belong to an intermediary class of world, those that are not only possible, but are susceptible of experience by us:

Synthetic a priori sentences... are sentences true not in all possible worlds, but in all really possible worlds. There is no world we could experience in which they would not hold; in this sense they are both universal and necessary. There are, for example, possible worlds in which the conservation of matter and what looks like Newton's third law of motion do not hold.... But there is no really possible world in which these latter propositions might hold. Worlds that they described would not be worlds, according to Kant, that we were capable of experiencing.⁸²

Brittan's point is that Newton's laws can be negated self-consistently as statements, but cannot be negated in the context of our possible experience. His claim can be made even weaker, and more epistemologically oriented, by simply using the laws of synthesis (the schematized categories) as examples of the parameters of any really possible world.

Kant takes the propositions of mathematics and natural science to be synthetic a priori propositions that need explanation. With metaphysics, however, he sees the question of explanation as referring to the very existence of such a science as well as determining what it actually is.

⁸²Brittan, 22.

The Pure Forms of Sensibility: Space and Time

Space and time are the pure intuitions that constitute the basic condition for our sensibility. Kant defines intuition as that through which a mode of knowledge immediately relates to objects. (A 19; B 33) Space and time are pure, as intuitions, because there is nothing empirical in them, i.e., nothing that is related to objects via sensation (this being empirical intuition). They are identified through the two-fold process of 1) removing from sensibility anything conceptual so that only empirical intuition is left, and 2) removing from empirical intuition everything that belongs to sensation, so that "nothing may remain save pure intuition and the mere form of appearances, which is all that sensibility can supply a priori." (A 22; B 36)⁸³ Space and time in this context are both the form of intuition, insofar as that form is considered non-conceptually, as well as pure intuitions in their own right.

Both space and time underlie all empirical intuition, while at the same time not being a property of things considered as existing by themselves. If the latter were the case, says Kant, then we would not be able to ground the certainty of, for example, geometrical propositions; as well,

⁸³It should be understood that Kant is not proposing a psychological reduction to space and time in any sense, a process that would be unintelligible in actual experience. This is a purely logical reduction.

it would be absurd to say then that there exist these entities, which are infinite and yet not substances, in which everything must be thought but, considered as properties of things must cease to exist when everything else does. (B 70-71) Perhaps more importantly one could say that if Kant takes the Copernican revolution as the fundamental axiom of his system, then he is entitled to discard any notion of space and time being either things-in-themselves or properties of the same. In fact, one might argue that he must necessarily discard such a notion, since he has already postulated space and time as the pure conditions of our sensibility, i.e., the conditions for things qua appearances, and hence they cannot apply to things qua things-in-themselves.⁸⁴

The major difference between space and time in the Kantian framework is that the first is the form of outer sense while the second is the form of inner sense. This distinction is criticized by A.D. Lindsay on the grounds that "outer" and "inner" are essentially spatial terms in the first place, and

⁸⁴This is a fairly standard statement about the role of space and time in Kant's framework. However, Paul Guyer argues convincingly that the reverse is the case. It is not because they are the conditions for our sensibility that space and time are not qualities of things in themselves; it is because they are not qualities of things-in-themselves that they are the conditions for our sensibility. This argument is based on the a priori nature of space and time, which, according to Guyer's reading of Kant, precludes their being properties of things-in-themselves, since otherwise they would only be empirical and not a priori. On this reading, however, Guyer finds that Kant is claiming more than the argument can sustain. See Paul Guyer, "The Rehabilitation of Transcendental Idealism?" Reading Kant, Ed. Eva Schaper and Wilhelm Vossenkuhl (Oxford: Basil Blackwell, 1989).

that what Kant is actually doing is distinguishing the world as objective from ourselves as subjective, a distinction, however, that both space and time help to create, rendering the inner-outer description somewhat confused.⁸⁵ All this notwithstanding, Lindsay finally concludes that:

"Inner" and "outer" are words which do not elucidate the distinction of time and space, but the distinction of time and space - or of duration and extensity - is not one which can be stated in terms of anything else.⁸⁶

The Transcendental Method

Having discussed sensibility Kant now moves to the understanding. This is contained in "Transcendental Logic," which is sub-divided into the Transcendental Analytic and the Transcendental Dialectic. His task here is to do for the categories of the understanding what has already been done in the Aesthetic for space and time. However, the categories are problematic in a way that space and time are not; the latter are relatively easy to derive as the conditions for our sensibility, since Kant can quite plausibly contend that no sensation is conceivable or intelligibly construed outside the space-time framework (at least, for us). This is exactly what then prevents him from saying that the categories are constitutive of our sensibility. The categories function at

⁸⁵A.D. Lindsay, Kant (Westport, Connecticut: Greenwood Press, 1970; reprint, 1934), 73-76.

⁸⁶Lindsay, Kant, 75.

a higher level than space and time, but for this very reason it would be implausible for Kant to contend that sensation itself is inconceivable without them.⁸⁷ In that case, whence comes their validity?

The answer that Kant works out turns on a distinction between bare sensibility and experience per se. The categories provide a unification of sensibility that we can then call "experience." Without such unification we would have only the confused data of sensation:⁸⁸

Without such unity... no thoroughgoing, universal, and therefore necessary, unity of consciousness would be met with in the manifold of perceptions. These perceptions would not then belong to any experience, consequently would be without an object, merely a blind play of representations, less even than a dream.
(A 112)

Thus the central problem of this part of the Critique would seem to be the constitution of the framework of possible experience, as opposed to the framework of sensibility. This constitution has generally been located in the sections of the

⁸⁷At least, saying so directly. Given the argument of the Analogies and the Schematism, the connection between time and the categories would make the categories very closely connected to a level of perception only slightly higher than the barest level of sensation conceivable.

⁸⁸It should be added that Kant is not suggesting that the possibility of such a bare and confused sensibility is a real possibility, let alone a fact. It is merely a hypothetical entity, much in the same way that one might talk of the skeleton without the living flesh, without suggesting that the skeleton walks about without this flesh. The difficulties of alluding to such a hypothetical entity becomes more of a problem in the Second Analogy.

Critique dealing with what Kant calls the Transcendental Deduction.⁸⁹

Transcendental Logic

Transcendental logic is different from general logic according to Kant because the latter "abstracts from all content of knowledge, that is, from all relation of knowledge to the object, and considers only the logical form in the relation of any knowledge to other knowledge; that is, it treats of the form of thought in general." (A 55; B 79) General logic is therefore not concerned with where knowledge comes from but solely with its inner relations. Transcendental logic, on the other hand, does not "abstract from the entire content of knowledge." It considers knowledge as the thought of an object, but only in its aspect as pure thought of an object. This, says Kant, can be done; there is precedent for it in the distinction between pure and empirical intuition shown by the Transcendental Aesthetic. If we can have pure and empirical intuition, why not pure and empirical thought? Hence transcendental logic would "contain solely the rules of the pure thought of an object". (A 55; B 80)

⁸⁹One commentator who takes issue with this is Paul Guyer, who argues that the original plan of the Critique of Pure Reason was located in what became the Analogies of experience. See Guyer, Kant and the Claims of Knowledge (Cambridge: Cambridge University Press, 1987), 27.

The Categories

The categories are the pure concepts of the understanding as partially derived from traditional logical principles. Initially Kant presents a table, divided into four parts, each having three members. This table represents the purely abstract and formal aspects of "the function of thought in judgment," and are based upon the recognized distinctions in logic at the time, though Kant admits to departing from these in some respects.

The actual table of categories, though supposedly paralleling the first table, is based on something different from, though related to, the function of thought in judgment. Kant lists three elements of the a priori knowledge of objects (A 78-79; B 104):

1. The manifold of pure intuition (discussed in the Aesthetic).
2. Synthesis of this manifold by means of the imagination (which Kant discusses fully in the actual Deduction).
3. The unification of this synthesis by means of the pure concepts of the understanding (the categories), which consist solely of the representation of such necessary synthetic unity.

Thus the principle of the categories is concerned with the synthesis of the given, rather than the analysis of concepts:

The same understanding, through the same operations by which in concepts, by means of analytical unity, it produced the logical form of a judgment, also introduces a transcendental content into its representations, by means of the synthetic unity of the manifold in intuition in general. On this account we are entitled to call these representations pure concepts of the understanding, and to regard them as applying a priori to objects - a conclusion which general logic is not in a position to establish.
(A 79; B 105)

But how are we to justify application of the categories to experience a priori? What is the X which forms the basis of this synthesis a priori? In other words, the categories must be deduced transcendently. Kant has already produced them following the list of logical judgments, which production he terms the Metaphysical Deduction. (B 159) His task now is to justify the categories through their being the basis of possible experience. This is what he terms the Transcendental Deduction.

The Transcendental Deduction

The transcendental deduction is considered to be one of the most problematic sections of the Critique. Such problems are frequently held to be a function mainly of the First Edition Deduction and not the Second Edition Deduction. Kant's commentators tend to concur in their commendation of

the way the second Edition Deduction avoids the epistemological obscurities and psychological observations of the First.⁹⁰ In many respects the Second is also simpler to deal with since it is not susceptible of the resolution into strata that Kemp Smith, following Vaihinger, lays out in his commentary.⁹¹

The Deduction is further divided into the subjective and objective deductions, a distinction that Kant himself makes. The former is supposed to treat of the process of the pure understanding, whereas the latter deals with the crucial part of the Critique, namely the validation of the categories of the pure understanding.

The Subjective Deduction

⁹⁰However, there are some departures from this general position. Among the older commentators Kemp Smith favours the First Edition deduction because of its greater use of temporality in the deduction and says that "the deduction of the first edition of the Critique, in spite of its contorted character, remains in my view superior to that of the second edition owing to this more explicit recognition of the temporal aspect of consciousness and to employment of it as the initial starting-point." Kemp Smith, Commentary, 242. Also, in a more recent work J.N. Findlay refers to the Second Edition Deduction as "a vastly confused document involving most of the logical faults of the First Edition Deduction, without its illuminating excursions into transcendental psychology." J.N. Findlay, Kant and the Transcendental Object (Oxford: The Clarendon Press, 1981), xv

⁹¹See Kemp Smith, Commentary, 202-208 for the intricate four-stage dissection of the First Edition Deduction.

The subjective deduction is found primarily in the First Edition deduction, although there are occasional references to it in the Second Edition deduction as well. The essence of the subjective deduction is its outlining of the manner in which consciousness apprehends and reproduces the manifold of sensibility. In order to render the content of sensation ready to be cognized, it must be unified for the understanding:

In order that unity of intuition may arise out of this manifold (as is required in the representation of space) it must first be run through and held together. This act I name the synthesis of apprehension, because it is directed immediately upon intuition, which does indeed offer a manifold, but a manifold which can never be represented as a manifold, and as contained in a single representation, save in virtue of such a synthesis. (A 99)

This, however is not enough:

When I seek to draw a line in thought, or to think of the time from one noon to another, or even to represent to myself some particular number, obviously the various manifold representations that are involved must be apprehended by me in thought one after the other. But if I were always to drop out of thought the preceding representations (the first parts of the line, the antecedent parts of the time period, or the units in the order represented), and did not reproduce them while advancing to those that follow, a complete representation would never be obtained: none of the above-mentioned thoughts, not even the purest and most elementary representations of space and time, could arise. (A 102)

This is the synthesis of reproduction, and although Kant carefully separates it in analysis from apprehension, it seems obvious that the two are closely bound up, i.e., it seems odd to think of apprehension without reproduction, in spite of the differentiation of the two for analytical purposes.

The third part of the synthesis is the synthesis of recognition in a concept. The necessity for this arises from the need to be conscious that what has been reproduced is actually reproduced, and not created anew. "If we were not conscious that what we think is the same as what we thought a moment before, all reproduction in the series of representations would be useless. For it would in its present state be a new representation which would not in any way belong to the act whereby it was to be gradually generated." (A 103) The way in which we are so conscious is through the unification of sensation in the concept of an object, an object, however, which must remain purely undifferentiated, an X for us.

What then does such unity consist of, since it does not consist of anything empirical? Following the Copernican shift Kant finds this unity within, in the unity of consciousness. He says "the unity which the object makes necessary can be nothing else than the formal unity of consciousness in the synthesis of the manifold of representations." (A 105)

All this, of a necessity, has strong psychological overtones and Kant refers to this part of the deduction somewhat disparagingly in the preface to the First Edition, contrasting it with the so-called objective deduction:

This enquiry... has two sides. The one refers to the objects of pure understanding, and is intended to expound and render intelligible the objective validity of its a priori concepts. It is therefore essential to my purposes. The other seeks to investigate the pure understanding itself, its possibility and the

cognitive faculties upon which it rests; and so deals with it in its subjective aspect. Although this latter exposition is of great importance for my chief purpose, it does not form an essential part of it. For the chief question is always simply this:-what and how much can the understanding and reason know apart from all experience? not:-how is the faculty of thought itself possible? (A xvi-xvii) [emphasis added]

However it is not absolutely clear that having psychological overtones makes an idea completely invalid. As A.C. Ewing points out, the connectedness invoked by Kant in his account of the threefold synthesis is arrived at "by logical analysis of what must be involved in any possible experience" and the proof of the synthesis "is essentially a proof that consciousness of the manifold as connected... is necessary if we are to be conscious of the manifold as a manifold at all."⁹² Moreover, the subjective deduction finds its point of connection with the objective deduction through the synthesis of recognition. The unity of consciousness that is the synthesis of recognition has its transcendental basis in an original unity of what Kant calls apperception. "For it is only because I ascribe all perceptions to one consciousness (original apperception) that I can say of all perceptions that I am conscious of them." (A 122) Such transcendental apperception, or, as Kant defines it, "pure original unchangeable consciousness" (A 107), is the main concern of the objective deduction, most of which is given in the Second Edition deduction.

⁹²A.C. Ewing, Kant's Treatment of Causality (Archon Books, 1969; reprint, 1924), 44.

The Objective Deduction

The objective deduction is concerned with synthesis and combination insofar as they relate to unification through the original unity of apperception. Through a discussion of this unity, Kant tries to deduce the categories as a necessary component of the process of unifying the manifold of sensibility in a single consciousness.

Kant opens the Second Edition deduction with a discussion of combination in general, as an act of the understanding, and, moreover, one which cannot be given to us through objects. Combination, i.e. "representation of the synthetic unity of the manifold" (B 130-131), is also not given through the category of unity in the table of judgments, for this, as a function of judgment presupposes a certain combination and unity of concepts. This unity can only be found in original apperception, which is also called "original combination" (B 133):

It must be possible for the 'I think' to accompany all my representations; for otherwise something would be represented in me which could not be thought at all, and that is equivalent to saying that the representation would be impossible, or at least would be nothing to me.... For the manifold representations, which are given in an intuition, would not be one and all my representations, if they did not all belong to one self-consciousness. As my representations (even if I am not conscious of them as such) they must conform to the condition under which alone they can stand together in one universal self-consciousness, because otherwise they would not all without exception belong to me. (B 131-133)

That bracketed "even if I am not conscious of them as such" might seem odd because of Kant initially talking of representations belong to one consciousness, which would seem to imply "being conscious of." How can these representations belong to me if I am not conscious that they do? However, the phrase, far from being at odds with the rest of Kant's statements, signals the advent of the objective deduction. Being conscious of representations as belonging to myself on an empirical level, which is what is being referred to in the phrase, is not only unnecessary for Kant's purposes, but might be positively harmful. His view of the empirical self is, in fact, that of Hume, which might in fact preclude any empirical consciousness of such belonging:

Consciousness of self according to the determinations of our state in inner perception is merely empirical, and always changing. No fixed and abiding self can present itself in this flux of inner apperances. Such consciousness is usually named inner sense, or empirical apperception. (A 107)

What we need, according to Kant, is a synthesis independent of experience, which is the original transcendental unity of apperception. Once he has this he declares that the overriding principle of the possibility of intuition, in relation to the understanding "is that all the manifold of intuition should be subject to conditions of the original synthetic unity of apperception." (B 136) In other words, for the content of sensibility to become an object for me, it must stand under the original unity of consciousness.

Now, far from being a synthetic proposition, the foregoing might seem to be almost absurdly analytic, and in fact Kant admits that it is, though he also points out that the actual unity is synthetic, i.e., its existence is not a matter of definition or analysis. (B 138) What he is actually saying is that "For perceptions to become objects for me, there must be a me, if only in the emptiest sense of the word." This is definitely not an analytic statement. If asked for the basis of saying there must be such a thing, Kant would reply that the basis is the possibility of experience and knowledge.

However, he does place a severely restrictive condition upon original unity of consciousness, namely, that there cannot be any knowledge of this unity or this "self":

Just as for knowledge of an object distinct from me I require, besides the thought of an object in general (in the category), an intuition by which I determine that general concept, so for knowledge of myself I require, besides the consciousness, that is, besides the thought of myself, an intuition of the manifold in me, by which I determine this thought. (B 158)

Which intuition we do not possess. This caveat is central to the determination of possible experience, even if only in a negative sense. The subject for Kant is transcendental, it is a condition of possible experience. It is not itself an object of experience, and, therefore, not an object of knowledge.

The transcendental unity of apperception provides the link between the categories and sensibility in this fashion: Through synthesis of apprehension and reproduction, empirical

intuition becomes possible; this empirical synthesis is only possible for us when referred to a unified consciousness (transcendental apperception); the combination, in general, of intuition in consciousness takes place by means of the functions of judgment, i.e., the categories. Thus:

All synthesis... even that which renders perception possible, is subject to the categories; and since experience is knowledge by means of connected perceptions, the categories are conditions of the possibility of experience, and are therefore valid a priori for all objects of experience. (B 161)

This is a relatively traditional interpretation of Kant, wherein the valid use of the categories is proven, as above, through the unity of the subject in receiving representations (the transcendental unity of apperception). The categories, on this view, apply to objects because the setting of the self over against objects is a process requiring both apperception as well as the use of the categories. However, in a recent work a critic of this view says:

The type of reconstruction of Kant's deduction which has been most popular during the last two decades essentially rests on the supposition that the very idea of knowledge of an object introduces a contrast between the arbitrary representations of states of the self as such and the rule-governed representation of an object...⁹³

One of the most recent and detailed criticisms of this view of the deduction is that of Paul Guyer. While an exhaustive discussion of his argumentation is not possible here, one of his main objections to the Deductions needs to be examined.

⁹³Guyer, Claims of Knowledge, 435-436.

Guyer sees the Deduction as taking four possible forms, only one of which need be discussed here. This is the argument concerning the deduction of the categories from their role in bringing any appearance to the transcendental unity of apperception.⁹⁴ Guyer sees this argument as a departure from the original project of the Critique, which he convincingly argues centered the problem of apperception in what became the time-determination theory of the Analogies of Experience.⁹⁵ However, in addition to being a simple and powerful argument in Kant's eyes, the theory of the transcendental unity of apperception plays, for Guyer, a more important role in the critical theory in general:

This newly discovered argument is also clearly connected with Kant's departure from his previous caution about the force of the laws of thought. With this new argument in hand, Kant leaves behind the view that conditions of the possibility of experience merely restrict the occurrence of experience to circumstances in which the given manifold of intuition happens to comply with these conditions, and instead gravitates toward the view that the conditions of possible experience are rules which the mind imposes on any possible manifold.⁹⁶

What seems problematic to me is what else Kant is supposed to have done, considering the parameters of his project in the Critique. If the project of the Critique is construed as finding the universal and necessary conditions for experience

⁹⁴This is IIA in Guyer's scheme. Guyer, Claims of Knowledge, 85.

⁹⁵Guyer, Claims of Knowledge, 61-70.

⁹⁶Guyer, Claims of Knowledge, 132.

occurring, then Kant cannot possibly ground the universality and necessity of the categories in "circumstances in which the given manifold happens to comply with these conditions." What he has to show is that any manifold coming before us has to conform to these conditions in order for us to have experience of it.

Of course, Guyer may be saying this because he has a stronger conception of what it is Kant wants to do in the Deduction than the one Kant actually holds:

What Kant comes to call the "transcendental unity of apperception" is not merely a ground for a priori knowledge of the objective validity of the categories but is itself something known a priori to obtain under all possible circumstances of representational activity. That is, Kant will actually assume not merely that experience has necessary conditions but that it is itself necessary - and this will introduce an absolute necessity which can ground the absolute necessity of applying categories to objects, thus imposing them on such objects.⁹⁷

However, it is not clear to me what it is that Kant has done wrong here; what would be wrong would be his assuming that the empirical element of experience is itself necessary, either in part or as a whole. But nowhere in the Critique of Pure Reason does he ever say this; in fact, in several well-known passages he goes perhaps a bit too far in the other direction,⁹⁸ suggesting a contingency of the empirical component that bodes no good for the work of the understanding.

⁹⁷Guyer, Claims of Knowledge, 61.

⁹⁸A653-654, B681-682; A100-101; A90-91, B123.

One more serious objection to the Deduction needs to be considered. This is Stephen Körner's well-known objection that transcendental deductions are impossible. Körner's objection rests on two main claims, the second of which depends in part on the first. The first is that transcendental frameworks,⁹⁹ or schemata, cannot establish any claim to uniqueness. Synthetic and a priori they may be, but not uniquely so. The second claim is that Kant's claims for the uniqueness of his framework are bound up with his ties to Euclidean geometry and Newtonian physics, and the advances over these indicate the non-unique character of his schema. I will not discuss the second claim here, as a section of the next chapter takes up the whole issue of how far Kant can and should be tied to the science of his day.¹⁰⁰ The first claim about uniqueness is the more serious charge and will be discussed in the light of Eva Schaper's critique of Körner's formulation of the problem.

Körner points out that a framework must be unique in its claim to differentiate a region of experience in order for a

⁹⁹Körner uses the words "schema" and "schemata." Eva Schaper has pointed out that using these terms when Kant also uses them for quite different purposes can be confusing, and she substitutes "scheme(s)." It seems to me that "scheme" has connotations that, while not subverting Kant's project, do not in any way convey either what Kant is advocating or what Körner is objecting to, and I will therefore use "framework," since a framework of possible experience seems to be what Kant is trying to explicate, and it is just the same sense of something all-encompassing and uniquely differentiating that Körner objects to.

¹⁰⁰See below, Chapter Three, 95-99.

transcendental deduction to take place. How can this uniqueness be demonstrated?

There are three possibilities: comparison with undifferentiated experience; comparison with other competing frameworks; and internal examination of the framework. The first method does not work because "the statements by which the comparison would have to be made, cannot be formulated without employing some prior differentiation of experience"¹⁰¹ and so, in Eva Schaper's words "one term of the contrast... always drops out."¹⁰² The second method does not work because, as Körner rather cryptically puts it, "this presupposes that they can all be exhibited, and is self-contradictory in attempting a 'demonstration' of the schema's uniqueness, by conceding that the schema was not unique."¹⁰³ The point is clearer in Schaper; comparison presupposes features in common, in which case the competitors would really be part of a larger framework, not really competing ones, or else it means comparison among the competitors with undifferentiated experience, already seen to be untenable.

The third method also does not work, but for a different reason. It is an internal examination of a framework or

¹⁰¹Stephen Körner, "The Impossibility of Transcendental Deductions," in Kant Studies Today, ed. Lewis White Beck (La Salle, Illinois: Open Court, 1969), 233-234.

¹⁰²Eva Schaper, "Arguing Transcendently," Kant-Studien, cumulative ed. vol.63 (1972): 106.

¹⁰³Körner, 234.

schema and "[s]uch an examination, at best, could only show how the schema functions in the differentiation of a region of experience, not that it is the only possible schema to which every differentiation of the region must belong."¹⁰⁴ However, this seems to rather minimize the nature of Kant's project and the language reflects this. He is not trying to differentiate a region at all; he is trying to show how this region can be constituted at all. This is also in great part Schaper's sense of Kant's project¹⁰⁵ but an added feature of her criticism of Körner is her contention that his dismissal of method three is too hasty; part of this stems from her argument that his other two methods are not really methods at all, since the first is not coherent and neither is the second, since the so-called competitors either do have features in common with the given schema, hence not really competitors, or they don't, in which case there are no terms of contrast to begin with, and hence, no real competitors.¹⁰⁶

What is gained from addressing Körner's criticism is not a defence of Kant as such, and indeed, Schaper points out that the validity of Kant's arguments is not the point of her discussion,¹⁰⁷ but at least it prevents Kant's very project from being stalled at the outset.

¹⁰⁴Körner, 234.

¹⁰⁵Schaper, 102 & 115.

¹⁰⁶Schaper, 110.

¹⁰⁷Schaper, 115.

Schematism

The schemata are presented by Kant as principles of the application of the categories; as Kant puts it, they "are simply rules for the objective employment" of these. (A 161; B 200) They are what Kant calls schemas, which form a point of unification between the categories and the manifold of sense.

Now it may seem puzzling as to why these are necessary. Why not just apply the categories directly without bothering with these intermediaries? However, as Kant points out, in order to subsume a given object under a concept, there must be something in the representation of the object that corresponds to something in the concept, i.e., there must be a basis for the subsumption. (A 137; B 176) The empirical concept of a plate, for example, corresponds in some degree to the geometrical concept of a circle. As Kant puts it, "The roundness which is thought in the latter can be intuited in the former." (A 137; B 176)

It should be remembered that here there is a match between pure and empirical intuition, between the spatial form of our sensibility and its empirical particular. The categories on the other hand, have no such direct relationship to sensible objects:

Pure concepts of understanding being quite heterogeneous from empirical intuitions, and indeed from all sensible intuitions, can never be met with in any intuition. For no one will say that a category, such as that of causality, can be intuited through sense and is itself contained in appearance. How,

then, is the subsumption of intuitions under pure concepts, the application of a category to appearances, possible? (A 137-138; B 176-177)

The necessary intermediary is the transcendental schema, which is a function of the time-determination we experience. Even though time is a pure intuition, its synthesizing of the manifold of inner sense and therefore its connecting of all representations, makes it homogeneous on the one side with the function of the understanding, which synthesizes and unifies the manifold in general. On the other side, time is homogeneous with appearances insofar as it is part and parcel of every empirical representation as one of the pure conditions of sensibility. So that, as Kemp Smith points out, in using time as the basis of schematism, Kant is starting from a given. Therefore its transcendental determination becomes the schema for the categories and facilitates their application to appearances.

Though Kant's discussion of this problem seems encased impenetrably in the armour of his jargon, the problem he sets and then resolves is of universal relevance. What he is simply saying is that having the categories on the one side and appearance on the other is useless; we must be able to apply the one to the other. But what justifies this application? Nothing, as Hume has shown, that exists in the appearances themselves. And the internal logical necessity of the categories does not, as Hume showed with causality, have anything to do with what empirical reality can produce.

Essentially, the question is one that Kant asks throughout the Critique of Pure Reason, namely, how can our basic concepts of knowledge apply to reality? How can subjective conditions of thought have objective validity? The answer, given in the most general terms of the Copernican revolution, is that they can only do so because they create that reality to a certain extent.¹⁰⁸ Since that extent is limited to the most general aspects of reality, that application must be of the most general sort. And it takes place through the mediating quality of the most general condition for sensibility, whose "being" is not conceptual like the categories, but whose function has the same synthetically unifying quality.

The schema also serves another purpose. It not only mediates between category and appearance, it confines the category to appearance. As Kant points out, "The category expresses a function which is restricted by no sensible condition". (A 181; B 224) Thus by itself the category, having

¹⁰⁸Of course, since we do not have what Kant terms intellectual intuition, that is the direct creation of our objects, this sense of creating the object must necessarily be ambiguous and smacks of the metaphysics of imposition that Paul Guyer objects to so much. However, the use of time (and space) in this so-called creation, means that we do not really create the objects so much as draw out what our sensations are embedded in, namely, space and time. But, since space and time are our pure intuitions, to that extent we do create the objects of our experience, since appearances appear to us as they do in virtue of our sensible and epistemic apparatus. It is an odd sense of creation, less akin to a craftsperson and their handiwork than to a coffee machine that might be said to produce the coffee it filters.

nothing directly in common with appearances, cannot directly apply to them. Hence the role of schematism.

Nevertheless, even as far back as Kemp Smith, the view begins to emerge that Kant's distinction between categories and schemata is more a function of the stratified composition of the Critique of Pure Reason than a helpful part of the transcendental method. Kemp Smith, for example, points out that Kant emphasizes, as part of a more mature outlook, that transcendental logic possesses "a pure manifold through reference to which its pure concepts gain meaning. Thus not only does transcendental logic not abstract from the pure a priori concepts, it likewise possesses an a priori material."¹⁰⁹ Specifically, the categories actually imply space and time and they are actual only as schemata:

The category of substance, for instance, differs from the merely logical notion of a propositional subject, in being the concept of that which is always a subject, and never a predicate; and such a conception has specific meaning for us only as the permanent in time. Logical subjects and predicates, quantitative relations apart, are interchangeable. The relation between them is the analytic relation of identity. The concept of subject, on the other hand, transcendently viewed, that is, as a category, is the apprehension of what is permanent, in synthetic distinction from, and relation to, its changing attributes. In other words, the transcendental distinction between substance and accidents is substituted for that of subject and predicate.¹¹⁰

¹⁰⁹Kemp Smith, Commentary, 194.

¹¹⁰Ibid., 195.

That is, the categories are schemata, rather than saying, as Kant does in the section on Schematism, that they are schematized:

Kant has virtually recognised this by the names which he gives to the categories of relation. But the proper recognition of the necessary interdependence of the intuitional and conceptual forms came too late to prevent him from distinguishing between categories and schemata, and so from creating for himself the artificial difficulties of the section on schematism.¹¹¹

Paul Guyer argues that prior to the Critique of Pure Reason Kant had already formulated a transcendental theory of experience similar to that of the Schematism and the Analogies, but that he only hastily inserted this into the Critique. This would seem to fit in with the view of the Schematism as a section written later than, say, the A Deduction, though it does not necessarily account for the B Deduction.

However, it seems to me that one can see the schematism as the real transcendental deduction without discarding or downgrading the previous deductions. The Metaphysical deduction provides a conceptual transition from forms of logical analysis to categories, forms of synthesis. The subjective deduction provides us with an account of how raw sensation is processed by us empirically and the objective deduction provides us with the justification for the transcendental subject, the unity of pure apperception. The

¹¹¹Ibid.

reason it does not actually provide the deduction proper is two-fold. Kant says that experience is possible through the categories, which are the internal system of the general unifying apperception that constitutes the transcendental subject ("All synthesis... even that which renders perception possible, is subject to the categories" B 151); nevertheless, saying so does not tell us anything about how this specifically takes place, and telling us how it takes place is the function of the schematism and the derivation of the schematized categories. The schematism also provides us with what was missing in the previous deductions; a transcendental representative for empirical data, i.e., pure time. Without such a transcendental representative, empirical data have no proper relation to the categories, and since possible experience includes properly unified empirical objects, it is difficult to see how a transcendental deduction based on the possibility of the existence of such objects could take place without a liaison between category and sensation. Before going through the process of schematism, the categories are motionless; the schematism shows them "in action."

CHAPTER THREE

THE FRAMEWORK OF POSSIBLE EXPERIENCE

In the previous chapter Kant's framework of transcendental idealism was delineated in general terms. In this chapter the first level of his two-tiered response to scepticism will be outlined and discussed. The first tier is the reconstruction of experience as developed in the *Analytic of Principles*, and specifically, in the *Analogies of Experience*. In particular, the discussion will center on the proof of causality given in the Second Analogy, since the thrust of Hume's scepticism is focused in this direction.

What I will be arguing is: 1) the proof of causality basically succeeds as a refutation of Hume's critique of the same, no matter how unpalatable some of the consequences of such a success may be;¹¹² 2) the proof of causality as given in the Second Analogy requires not only the careful recognition of the role of the empirical order but an equally careful limitation of this role to actual and not possible

¹¹²For example, despite the Refutation of Idealism, and any possible function of things-in-themselves, I do not think that Kant escapes idealism in general and its problems, which may be the reason for the metaphysics of the Critique of Judgment. However, such issues are beyond the scope of this discussion.

experience;¹¹³ 3) this proof does not succeed in a complete refutation of Hume's epistemological scepticism in general, particularly the problem of induction, and a second tier, or line of defence, becomes necessary;¹¹⁴ and that 4) the ambiguity of the status of empirical unity in the Analogies, particularly in Kant's examples, introduces some confusion between the problems of experience and knowledge.

The second tier is the resolution of the problem of knowledge. This is not really addressed in the Transcendental Analytic, even though Kant's overall goal is the construction of such a solution. As Gerd Buchdahl points out, what he does succeed in doing is constructing a framework of possible experience, within which knowledge is possible.¹¹⁵ In the Transcendental Dialectic, however, he addresses the problem

¹¹³I appreciate George Schrader's interpretation on this point, but I hope to show that his inclusion of empirical unity in the transcendental framework of possible experience is too strong to be compatible with Kant's project.

¹¹⁴The non-resolution of the problem of induction in the Critique of Pure Reason is J.D. McFarland's point, and I follow the general form of his analysis; however, on some critical points I differ from him, particularly on whether Kant carries through the second tier in the Critique of Judgment.

¹¹⁵Schrader argues that the framework of possible experience itself has a "hidden" component of empirical coherence that is only fully developed in the discussion of reflective judgment in the Critique of Judgment, but I will argue that this detracts from Kant's argument, though it is admittedly difficult to separate possible experience and empirical coherence. Nonetheless, this hidden component of empirical unity or coherence must, since it relates to the empirical, be part of actual, rather than possible, experience. See Schrader, 209-211.

via the discussion of the goals and limitations of the faculty of reason. This becomes evident in the discussion of the regulative use of the Ideas of Pure Reason.¹¹⁶

The Analogies

There are four types of schemas given by Kant, dealing with magnitude as represented through number, magnitude as represented through degree, experience as given through the connection of perceptions, and objects as possible, actual, or necessary. These are respectively:

1. Axioms of intuition.
2. Anticipations of perception.
3. Analogies of experience.
4. Postulates of empirical thought in general.

They are based upon the table of categories that Kant gives earlier on. (A 80; B 106)¹¹⁷ This discussion will be

¹¹⁶Such discussion notwithstanding, I will argue in the next chapter that not only does Kant replace this use of the ideas of pure reason with the principle of reflective judgment, but that his doing so can be justified on several grounds.

¹¹⁷A common criticism of Kant from even his most sympathetic commentators is aimed at his table of categories. The criticism aims at Kant's correlation of this table with the traditional table of categories of judgment given earlier (A 70; B 95) as well as at his claim that 1) such has to be complete and that 2) his table is complete. See Lindsay, 84-85; Kemp Smith, Commentary, 177-186; and Ewing, 60. Even H.J.

limited to the Analogies of experience, with special emphasis on the Second Analogy.

In the First Analogy Kant develops the notion that we have permanence of substance because of the unity of time being such that no gaps in it are susceptible of being perceived by us. His highly Parmenidian argument is not at all based on a psychological inability to do so, but upon the logical impossibility of such perceiving taking place.¹¹⁸ However, it should be noted that such a logical characteristic, while based upon the law of non-contradiction, depends as well upon the pure conditions of our sensibility, i.e., given our sensibility it is contradictory to have perceivable "gaps" in the sense of an absolute nothingness. This dependence means that the logic of the permanence of substance is also transcendental and thus based on the conditions of the possibility of experience by us or any creatures like us in sensibility and reason.

The Second Analogy

Paton concedes that "With the best will in the world we cannot justify, though perhaps we can excuse, Kant's belief in the necessity and completeness of his list of forms." H.J. Paton, Kant's Metaphysic of Experience, Vol.1 (London: Allen & Unwin, 1936), 209. However, none of these commentators treat this weakness in Kant as a major weakness in the overall structure of the Critique of Pure Reason.

¹¹⁸In a more contemporary idiom, it would be impossible to articulate the meaning of such gaps.

In the Second Analogy the argumentation becomes much more tricky. Unlike permanence, causality is both specific and general. It is specific insofar as one refers to a specific cause generating a specific effect or effects; and it is general insofar as such specific causes and effects imply a causal sequence, or at least a general holding of the rule of causation. The problem with any proof of it is that any such proof ought to provide clear evidence for the general necessary existence of causality, i.e., that events are linked causally in general, without slipping into an attempt to provide evidence that this or that causal sequence is necessarily existent. A further distinction is that this general existence of causality can be taken to mean either a rule of "same cause, same effect," which is the formulation stressed and critiqued by Hume in the Enquiry, or a rule of "every effect, some cause," which is the formulation of the Treatise. Since this is really the thrust of Hume's scepticism, or at least the one felt most by Kant, the latter formulation is what he must be defending in the Second Analogy; however, as will be seen, the far more material claim of the first formulation intrudes at times into Kant's argumentation, in great part because the related but distinct problems of experience and knowledge tend to be conflated in the discussion.¹¹⁹

¹¹⁹Jeffrey Dodge in fact argues that Kant needs the first formulation in order to make the second one; this would, in my opinion, make Kant's claims far too strong, leaving him wide

Kant begins by reminding the reader that the First Analogy has shown that "all change (succession) of appearances is merely alteration." (B 233) He then goes on to say that in perceiving the succession of appearances he is actually connecting perceptions in time, the work not merely of the senses and intuition, but of a synthesizing imagination. He then adds that imagination can connect, say, two states of things in two ways, either one preceding or succeeding in time:

For time cannot be perceived in itself, and what precedes and what follows cannot, therefore, by relation to it, be empirically determined in the object. I am conscious only that my imagination sets the one state before and the other after, not that the one state precedes the other in the object. In other words, the objective relation of appearances that follow upon one another is not to be determined through mere perception. (B 233-234)

Thus, succession in one's perception is not to be taken as being succession in the object. This might suggest a contrasting of subjective with objective knowledge but in fact the point it supports, that all our perception is successive but, in the object some perception is not of a succession but

open to even more criticisms than already generated by the proof of the second formulation. Dodge's point, however, is supported by the ambiguity of the examples Kant uses; ambiguity that is in turn rooted in what I take to be Kant's conflation of two distinct problems. What Dodge does do is to point up the different projects at work in the Second Analogy, although he then takes this as evidence that the projects are necessarily intertwined. See Jeffrey R. Dodge, "Uniformity of Empirical Cause-Effect Relations in the Second Analogy," Kant-Studien, vol.73, Heft 1, (1982).

of an interaction, is a point about the construction of possible experience.

For example, when we look at a house our perception, as all perception is, is successive; nevertheless, we do not say that the house, as an object, is successive, since we can also view its parts in any order of succession that we like. It is not an event. An event is something wherein the succession of perceptions cannot be anything other than a succession; we cannot cast our eyes back upon the various representations that compose our perception of an event, because then it would be a thing. When we perceive an event, "there is always a rule that makes the order in which the perceptions (in the apprehension of this appearance) follow upon one another a necessary order." (A 193; B 238)

Thus, in Kant's much analyzed ship example, the perceiving of a ship moving downstream is determined in such a fashion that the order of the perceptions is irreversible. I cannot first see the ship moving lower in the stream and then see it higher up.

This of course seems quite arbitrary, at least in the way it is phrased, and one is tempted to ask, as does Jonathan Bennett, why in certain cases the reverse should not occur. In Bennett's counter-example, he posits (a) that a long-boat is rowed out of the harbour and that (b) in addition to his actually perceiving this in a certain order, it was necessary that he perceive it in this order.

But since the coxswain of the boat was under orders from me, I could have secured for myself the spectacle of the boat being back-paddled, stern foremost, into the harbour. So, (a) is true and (b) false, and Kant's analysis of (a) is therefore wrong.¹²⁰

However, this criticism can be easily met. Arthur Melnick summarizes Bennett's objection as that "if A came before B, I still could have first perceived B and then perceived A by acting (interfering) to make B come before A."¹²¹ He then goes on to differentiate A-B and B-A as different events and argues from this that:

The fact that if I had perceived event 2, rather than event 1, the order of my perceptions would have been reversed (which is all that Bennett's objection amounts to) does not mitigate [sic] against the fact that given I perceived event 1, my perception of A had to precede my perception of B....¹²²

That is, Bennett's objection depends on there only being one event perceived, whereas the structure of his argumentation surreptitiously introduces another.

We need then a rule to govern this determination of perceptual order. This rule cannot, Kant reminds us, be derived by induction from experience, for it would then be merely empirical. (A 195-196; B 240-241) It must be a priori and synthetic, both of which characteristics are supplied by reference to time. Time is a pure intuition given a priori and the relation of causality to this pure intuition supplies

¹²⁰Bennett, Kant's Analytic, 222.

¹²¹Arthur Melnick, Kant's Analogies of Experience (Chicago: The University of Chicago Press, 1973), 79.

¹²²Melnick, 79-80.

the element of synthesis lacking in the analytic proposition "Every effect has a cause."¹²³ Objective succession of appearances must be supplied through pure time-determination.

How can the objective relation of appearances in time be determined and what does Kant mean by such determination? There are two obvious possibilities, each of which has textual support.

1. Causality as the constructor of an objective order in experience, as opposed to a subjective order.
2. Causality as the constructor of the subjective order of experience, defined as the experience of temporal and empirical succession.

The first possibility is that what Kant means by the determination of the objective relation of appearances in time is that order of perceiving that we assign to objects as

¹²³Martin Kalin argues that, in fact, the only thing Kant accomplishes in the Second analogy is the defence of the tautology that every effect has a cause. However, his argument, a defence of the thesis propounded by Lewis and Lovejoy, turns on Kant's so-called admission or anticipation of non-caused experience, which Kalin uses to show that the universality and necessity of causation depends on a tautological definition of all objects of possible experience as caused; the major problem with his argument is that he conflates the specific and general senses of causality in the Second Analogy even more than Kant himself, to a point where the arguments of the Third Analogy are almost completely ignored and where perceptions of non-events like houses are called "appearances occurring in merely subjective time". See Martin G. Kalin, "Kant's Transcendental Arguments as Gedankenexperimente," Kant-Studien, vol.63, cumulative ed. (1972): 320.

independent of us as opposed to that order of perceiving which is construed as belonging only to the subject.¹²⁴ On such an interpretation the application of the categories, here specifically causality, involves making cognitive and objective judgments about a manifold of sense already interpreted or judged subjectively and empirically. Arthur Melnick outlines the basic form of this interpretation:

Thus there is always an objective unity of representations involved in judgment, in that judgment always involves the assertion of a connection (a unity) not between the concepts employed in making the judgment (though these concepts are connected in my thought in the sense that I am employing one together with the other), but in the object of the judgment.¹²⁵

This general distinction between concept and object, which involves an appeal to some sort of objectivity, can be applied specifically to causality, shifting from the concept/object contraposition to its counterpart, the perception/object contrast. Here the objectivity introduced by the applied category of causality asserts the objectivity of succession in the object, and without this objectivity we would have merely a subjective perceptual succession concocted by the imagination. There certainly seems to be some evidence in the

¹²⁴Such a distinction should not be taken, of course, as part of the phenomena/noumena division, since this division between objective and subjective is, unlike the former one, within the realm of possible experience. Nevertheless, some interpretations of Kant, particularly that of Paton's, turn on assigning a role of sorts to the things-in-themselves, whatever they may be.

¹²⁵Melnick, 34.

text for this position, as well as a certain amount of plausibility in its argumentation. Kant does make a number of statements along these lines: "Since the subjective succession by itself is altogether arbitrary, it does not prove anything as to the manner in which the manifold is connected in the object." (A 193; B 238); "For mere succession in my apprehension, if there be no rule determining the succession in relation to something that precedes, does not justify me in assuming any succession in the object." (A 195; B 240); and, seemingly the most supportive of all:

We have representations in us, and can become conscious of them. But however far this consciousness may extend, and however careful and accurate it may be, they still remain mere representations, that is, inner determinations of our mind in this or that relation of time. (A 197; B 242)

All of these statements point to one thing; that we have subjective perceptual consciousness, which can be "careful and accurate"¹²⁶ thus ruling out its being a sort of primordial and non-determined consciousness, and we need some kind of principle by which this subjective order of perceiving becomes transmuted into an objective order. As H.J. Paton puts it, "[t]here is an objective world which we seek to know, and

¹²⁶It is on this exact point that Paul Guyer turns his argument that empirical consciousness is what the categories must justify, arguing that it is the possession of the manifold in empirical or "interior" consciousness that requires a synthesis. See Guyer, Claims of Knowledge, 147-148.

which must be distinguished from the subjective series of sensations and thoughts by which we seek to know it."¹²⁷

However, as A.C. Ewing points out, the question here is "how the same representations can be regarded as both subjective and, in a different setting, objective, and how we can pick out of the subjective order of representations those which are also objective."¹²⁸ In other words, what criteria can we use to differentiate the two orders? This is obviously one of the questions that the Second Analogy, on the subjective/objective interpretation, has to answer.

The difficulty lies in seeing how Kant can answer the question without giving the category of causality a much stronger role than anything warranted or even desired by the project of the Critique of Pure Reason. The formal category itself, even in its schematized aspect, cannot predict or classify the content of representation. It cannot set aside certain representations as subjective, while marking others as objective. And yet, in what other way can the two orders be differentiated? According to Kant, only in this fashion:

If we enquire what new character relation to an object confers upon our representations, what dignity they thereby acquire, we find that it results only in subjecting the representations to a rule, and so in necessitating us to connect them in some one specific manner; and conversely, that only in so far as our representations are necessitated in a certain order as

¹²⁷Paton, Vol.One, 59.

¹²⁸Ewing, 77.

regards their time-relations do they acquire objective meaning. (A 197; B 242-243)

Now, as far as the subjective-objective interpretation goes, this passage says very little in the way of what it means to subject representations to a rule. It still leaves us with the question of what representations get this special treatment? It cannot be all representations, for the interpretation turns on the point that there is a subjective order of representations and an objective one. If these orders are the same in content, what differentiates them in form? The category of causality? In which case we are back at the question of just how this takes place. As Lewis White Beck points out:

The difference between seeing Paris and dreaming Paris is not a categorial difference, but an empirical difference. The "category" dream rightly does not appear in Kant's table. The categories Kant is interested in are presupposed in our having and reporting either type of awareness. The categories do not differentiate veridical from non-veridical experience; they make the difference between dumbly facing chaos without even knowing it - "less even than a dream" - and telling a connected story, even if it is false.¹²⁹

Obviously, then, the task of the Critique of Pure Reason is to show how it is possible for us to tell a connected story, i.e., how experience can be constructed, while the tasks both of choosing among stories, an empirical task in essence, and

¹²⁹Beck, 54. Beck, however, does not distinguish between the possibility of telling a connected story and actually doing so; the structure of the former is not necessarily the same as the latter, just as possible experience is not yet actual experience.

of actually telling one, are given their transcendental structure in the Critique of Judgment. This structure, however, is not only anticipated by the Critique of Pure Reason, but is often conflated by Kant with the basic structure of "telling the connected story." Part of the reason for this conflation may lie in the overlapping nature of the possibility of telling the story, actually telling the story and which story to tell.

In this context, then, what Kant means by an object, or by making something an object, can have two meanings: in one meaning it could denote making something into an object, period (the construction of possible experience); in the other, it could mean determining the intersubjective validity of the object (its objectivity, in the popular sense) as well as its relation to other objects. In both aspects of the second meaning, object construction has to do with knowledge, with the validation of subjective experience (in virtually the popular sense) by comparing with intersubjective experience and by comparing various subjective experiences with one another, two components hard to separate.

Nevertheless one more candidate should be considered for the strong objective-subjective distinction. This is the possibility of seeing the subjective-objective distinction as reflecting a Newtonian distinction between, say, sensible

appearance and fundamental scientific laws.¹³⁰ In such a view, the primary purpose of the Analytic, and indeed, of the Critique as a whole, is to provide a corroboration of scientific law on methodological and metaphysical levels. The plausibility of this view is made stronger by Kant himself, who finds that mathematics and science both consist of synthetic propositions a priori, although in science these are principles only while in mathematics they form the whole of the subject. (B 14-24) Moreover, he states that two of the questions that the Critique must answer are "How is pure mathematics possible?" and "How is pure science of nature possible?" (B 20)

The textual evidence notwithstanding, such a view is not really tenable. Gerd Buchdahl remarks that many scholars believe that "Kant intended to lay the foundations of Newtonian 'nature' in the analytical portions of the first Critique."¹³¹ He goes on to say that this is a misreading of what Kant does in the Critique of Pure Reason:

¹³⁰In fact, the Critique has been taken to be in the main a metaphysics of Newtonian science, and its success has been thus gauged according to whether it succeeds in this. Hence T. D. Weldon can say that "the aim of the Critique as a contribution to epistemology was.... to conceive the categories of mechanics as forms of thought while standing firmly by empirical realism." T.D. Weldon, Kant's Critique of Pure Reason, 2nd. ed. (Oxford: At the Clarendon Press, 1958) 109.

¹³¹Gerd Buchdahl, "The Conception of Lawlikeness in Kant's Philosophy of Science," Proceedings of the Third International Kant Congress held at the University of Rochester, March 30 - April 4, 1970, ed. Lewis White Beck (Dordrecht, Neth.: D. Reidel Publishing Company, 1972) 149.

The Analytic purports to establish no more than the experiential notion of an objective 'nature' in general, regarded as a series of singular contingent happenings and things, a notion which according to Kant essentially involves certain categorial concepts, some of which - especially the categories of relation, including those of causality and interaction (mutual causation) - have a lawlike character.¹³²

In a more detailed look at this point, Buchdahl shows that the question of the possibility of natural science in general (the question raised by Kant at B 20) "leads to the more general enquiry into the possibility of framing cognitive judgments concerning bodies and their states as such."¹³³ This is crucial to Newtonian science, of course, since it establishes a coherent field of experience within which such science can proceed, but it is also very clear that "such a question completely transcends the interests of Newtonian science, and indeed of natural science in general, and concerns the whole body of human knowledge."¹³⁴

Buchdahl shows this concretely by analyzing the concepts used in the Critique with reference to their possible counterparts in the Metaphysical Foundations of Natural Science.¹³⁵ For example, Kant's argument in the Third Analogy is designed to validate "the notion of objective coexistence

¹³²Buchdahl, "Conception of Lawlikeness," 149.

¹³³Buchdahl, Metaphysics and the Philosophy of Science, 481.

¹³⁴Ibid.

¹³⁵Buchdahl, "Conception of Lawlikeness," passim.

of a plurality of bodies"¹³⁶ which "simultaneously yields demonstration of the real possibility of coexistence."¹³⁷ This possibility is in turn demonstrated in the Metaphysical Foundations of Natural Science by borrowing and applying the transcendental principle. Thus he concludes:

It is quite wrong to saddle Kant with the view, expressed by some commentators, that the Third Analogy was meant to demonstrate or that it was meant to entail (and if so, entirely fallaciously) the conclusion that between all physical bodies there act forces. Rather, the argument of the Foundations only contends that whilst interaction is an essential conceptual component of our notion of coexistence (part of the notion of nature in general), the corresponding principle of interaction may be applied to yield the construction as given in the proof of the Third Law of motion.¹³⁸

The same argument applies to causality and Buchdahl's discussion of it will be examined later, as his analysis provides the framework of the transition from the construction of experience to the problem of knowledge.

One of the reasons that this setting aside of Kant as Newtonian apologist is generally important is that it prevents his system standing or falling by the status of Newtonian physics. T. D. Weldon, who emphasizes strongly Kant's project of justifying Newton, cites this as part of the reason for

¹³⁶Buchdahl, "Conception of Lawlikeness," 167. Of course on Paul Guyer's argument, the Third Analogy as schematism would not really validate the notion of objective coexistence at all; rather, it would be itself the only truly transcendental notion of objective coexistence that we could possess.

¹³⁷Buchdahl, "Conception of Lawlikeness," 168.

¹³⁸Buchdahl, "Conception of Lawlikeness," 168.

failure of the Critical system, that is, its dependence on a theory that is now no longer supreme in physics.¹³⁹ As Buchdahl points out, the lack of proper correlation between the apparatus of the Critique and the analysis of the Metaphysical Foundations, means that "any change in the picture of physics, for instance from the Newtonian to post-Newtonian period would as such seem to leave the core of the critical arguments intact, unless it is shown that more basic 'classical' assumptions have insinuated themselves into the body of the Critique itself."¹⁴⁰ In fact, W.H. Werkmeister argues that Kant was not uncritically supportive of Newtonian ideas and that the Critical standpoint is perfectly compatible with contemporary developments in physics and even anticipated these to some extent.¹⁴¹

Therefore the attempt to see the Analogies as part of a direct attempt to prop up Newtonian science (and thus substantiate the subjective/objective analysis) is not very plausible in the larger context of Kant's work, especially because he does attempt a direct correlation in another work. However, even with this not at issue, a commentator such as Bird, who otherwise takes issue with standard interpretations

¹³⁹Weldon, 97-98 & 129.

¹⁴⁰Buchdahl, "Conception of Lawlikeness," 168-169.

¹⁴¹W.H. Werkmeister, "Kant's Philosophy and Modern Physics," in Reflections on Kant's Philosophy, ed. W.H. Werkmeister. (Gainesville: University Presses of Florida, 1975), passim.

of Kant that lean toward phenomenalism and reject transcendental idealism, can say on the one hand that

... the categories and their principles operate no less even in our ordinary experience, and Kant intends to establish their status by showing how they govern that experience as much as the laws of physics. The categories and their principles are responsible for our discrimination of such temporal phenomena as duration and succession, and these belong as much to our ordinary experience as to science.¹⁴²

He then says, on the other hand, that what Kant does in validating the categories is to restore the conditions under which objective judgments, as opposed to subjective associations, are possible.¹⁴³ These statements sit uneasily together. The categories are the conditions of ordinary experience but such experience is not merely or obviously objective but has a subjective aspect as well. When we divide experiences into subjective and objective, the popular sense of the terms is "personal" as opposed to "public" or "intersubjective." Nevertheless, analysing intersubjective experience unearths a conglomerate of subjective experiences, agreed upon through comparison of a sort and over a period of time. This sort of agreement is highly empirical in nature, depending upon individual and collective experience as they inform each other over time. This sort of inter-subjective determination cannot be directly governed by the categories, insofar as the latter do not prescribe any specific empirical

¹⁴²Bird, 150.

¹⁴³Bird, 166.

character to events (although the categories do govern experience, just not the material of experience); such interpersonal experience should be taken rather as a primitive knowledge system, whose relation to scientific systems would be that of primeval Eohippus to the modern horse. Kant seems to recognize this knowledge-governed aspect of ordinary experience, when he says in the Critique of Judgment that his definition of common sense, a principle of aesthetic feeling, is "essentially distinct from the common understanding that is sometimes also called common sense (sensus communis); for the latter judges not by feeling but always by concepts, even though these concepts are usually only principles conceived obscurely."(J238)

What is left of objectivity in the Critique, once the Newtonian apologia is shifted elsewhere and a strong sense of "objective" is discarded, is only a general sense of the understanding making intelligible the matter of sensibility. Since a strong sense of objectivity has been shown to be problematic, there can only be a weak sense of the notion of objectivity, one in which the categories construct and unify the so-called subjective order of experience. This would, if successful, undermine Hume's scepticism, since Hume's conclusions are based upon his reasoning from a subjective field of atomic sense-impressions.

This is essentially the project of both Lewis White Beck and Paul Guyer, particularly the latter. Beck argues that

Kant's project succeeds if he can show that Hume's conclusions depend upon premises that in turn require the transcendental conclusions Kant draws; Guyer fleshes this out by showing that the justification of empirical judgments is what Kant had in mind in his transcendental deductions, as was shown in the previous chapter.

Where I differ with both Beck and Guyer is the question of the exact nature of what it is the Analogies, or the construction of possible experience means. In spite of numerous passages, such as the one quoted above on seeing and dreaming Paris, Beck still seems to take a predominantly subjective-objective view of the construction of possible experience, with a popular sense of "subjective" and "objective" coming to the fore. This is borne out by his idea that the fundamental premise of Hume's arguments is our possession of sense-objects and that it is by showing what is fundamental to such possession that Kant responds to Hume:

If Hume had rigorously employed the phenomenalist language to which he is alone entitled, he would not have been able to draw his *prima facie* distinction between a sequence of impressions and a sequence of perceived objective events, as if the latter were as directly given as the former. He would have seen that the sequence of impressions of a house and the sequence of impressions of a moving ship require rules for interpreting one sequence of impressions as the perception of a stationary permanent object and the other sequence as the perception of a sequence of states or positions of a changing object.¹⁴⁴

¹⁴⁴Beck, "A Prussian Hume and a Scottish Kant," in Essays on Kant and Hume, 128.

So far this seems reasonable. But then he goes on to say that without "the concept of causation we could not distinguish between objective events and subjective sequences".¹⁴⁵ Granted, Beck does not take "objective" to mean outside of our perceptions, but, while it is true that the conceptual aspect is the relevant transcendental component of the Second Analogy, indeed, of all three, his analysis weights the construction of experience too heavily in the direction of this component; experience, that is, actual experience, within which we distinguish between events and states, has a component of empirical ordering indispensable to such distinguishing, yet not simply identical to the manifold of sense or even appearances taken en masse. When this empirical component¹⁴⁶ is developed in the Critique of Judgment, what will result is that much of the burden of actual experience, not to mention knowledge, is shifted from the first to the third Critique.

What this means is that there is something between "dumbly facing chaos" and "telling a connected story" for the categories surely cannot bear the brunt of the latter but obviously have something to do with resolving the former. The

¹⁴⁵Ibid., 129.

¹⁴⁶I have been calling this an empirical component for lack of a more suitable term that would not anticipate too soon the Critique of Judgment; nevertheless, the term is inaccurate, since it will be seen that it is more a question of a principle of empirical ordering or unity in the third Critique, than of appealing to experience directly.

telling of a connected story involves, if only in a primitive sense, a certain knowledge, a discrimination of sense-impressions that is primarily empirical in origin, and hence no concern of the critical project, but which presupposes an underlying principle of systematicity that is the province of reflective judgment in the third Critique. When certain impressions are determined to be recurrent enough to constitute an object, what is it that allows one to recognize that these sequences of perceptions are indeed recurrent, that is, that they resemble one another? There is a large temporal, empirical, intersubjective, and historical factor to this recognition, but as far as the transcendental method is concerned, this activity takes place within the context of a principle of the future resembling the past, indeed can only take place within this context. And if this is what lies behind telling a connected story, then this involves far more than the work of the categories, which implies that the activity of the latter must be something far more subtle.

With Paul Guyer the problem is a bit different. Although his complex dissection of the Deductions aimed at showing that these were not successful in proving the validity of the categories re a priori consciousness and that a successful Deduction only resulted from validating the schematized categories re empirical consciousness, he goes, in his discussion of the Second Analogy, from a weak conception of empirical consciousness as possession of a manifold and

what this entails, to a strong conception of empirical judgments.

In many ways this is not an invalid move since the line between empirical consciousness and empirical judgment is fluid, and since, in a pure sense, we do not have empirical consciousness capable of inspection or articulation that involves no judgments, for this would amount to saying we have uncategorized experience.¹⁴⁷ However, empirical judgments are still stronger in form than empirical possession of sense-objects, and even if empirical judgment plays a role in formulating these objects it still belongs to the type of a knowledge-system, though often an extremely primitive one. I will argue that such systems play a role in the formulation of the objects of even our subjective experience, but that the categories, particularly the Analogies, provide the a priori syntax for the semantics provided by such systems. As such, Guyer's switch from empirical sense-object possession to empirical judgment in the Second Analogy leads him into the error of ascribing the functions of the Analogy to separating subjective from objective experience, a function which, I will argue, belongs to the principle of empirical unity, namely the principle of reflective judgment, and therefore not to the categories.

¹⁴⁷And this is the reason for Kant's difficulty in trying occasionally to provide a rhetorical sense of what uncategorized experience would be like; his best try is that it would be "less even than a dream." (A 112)

Subjective Order In the Second Analogy

There are what appear to be two distinct points argued in the Second Analogy:

1. That we need a rule of causality that stands all our successive perceptions in a causal sequence.
2. That we need a rule of causality that makes specific sequences of perceptions irreversible, and therefore, valid.

These two points are the correlates of the two problems posed by Hume re causality: what is it that validates causality at all and in general? And what validates given causal sequences in specific? These are the two problems of the Treatise and the Enquiry, respectively, and they are unfortunately not separated in Kant's treatment of them.

As we saw before,¹⁴⁸ Kant states that it is a rule that determines the necessary order of our perception of a succession. This rule is a necessary rule of our apprehension (A 191; B 236), not any old empirical rule (such as Hume's constant conjunction). It distinguishes objective succession from subjective succession:

¹⁴⁸Above, 90-91.

The objective succession will... consist in that order of the manifold of appearance according to which, in conformity with a rule, the apprehension of that which happens follows upon the apprehension of that which precedes. Thus only can I be justified in asserting, not merely of my apprehension, but of appearance itself, that a succession is to be met with in it. This is only another way of saying that I cannot arrange the apprehension otherwise than in this very succession. (A 193; B 238)

What Kant seems to be saying here is that the rule determines that my subjective perception is a perception of a succession, of an event, as opposed to an object, where the perception, according to a rule, would be of co-existence, of a community. In both cases, as was previously pointed out, simple subjective apprehension itself is always successive, whether of events or objects; the binding rule in either case raises this simple apprehension to a sophisticated level where our subjective apprehension apprehends events and objects.

However, on this interpretation Kant would have things hind end foremost, meddling in matters more properly dealt with empirically. He says our apprehension of a ship is "bound" in such a fashion that we can never see its appearance lower down the stream prior to its appearance higher up, but only after, and it is this "binding" (a priori) that makes a ship going down a stream an event. When we have a house, the apprehension of it is bound a priori so that we can view its parts in whatever order we please, making this appearance co-existent, a community of perceptions, or, what we would ordinarily call an object.

Thus the a priori rule-governed succession that is a ship going downstream binds our apprehension of this manifold in such a fashion as to make it the apprehension of a succession or event. The subjective succession of apprehension must be bound by the objective, rule-governed, succession, because there is nothing intrinsic to subjective succession to make it distinguish events from objects (since subjective succession is always successive). (A 193; B 238) Binding by the objective succession (or co-existence) allows us to say, as it were, that "My perceptions A B C D etc. come to me successively, whether of a house or of the ship sailing, but in the latter case the ABCD sequence will not have its order re-arranged, whereas in the former case I am free to re-arrange the order." One might say that with events, the subjective and objective orders are in unison, whereas with objects they are not, since the former remains successive, while the latter is governed by a principle of co-existence.

Now it would seem more plausible, even in the transcendental and critical context, to say that our a posteriori empirical experience of ships going downstream and houses remaining in place for our inspection, is what allows us to characterize these as events and objects respectively. True, it could be contended that we still need a schematized category of succession and one of co-existence to provide the "boxes" into which we place these respective appearances. This transcendental component notwithstanding, it is difficult

to show that any category, even a schematized one, is going to tell us that when we perceive a ship sailing down a stream that the order of perceptions is irreversible. The order of perceptions consists of a specific set of perceptions, and specific sets of perceptions, and their specific relations to other perceptions, cannot be determined by the categories. There seems to be a missing piece somewhere.

Kant of course also refers to the perception of a succession as the perception of an irreversibly determined sequence of time, and this might suggest that it is not the specific order of perceptions that is determined, so much as their underlying time-sequence, which, as was seen in the First Analogy, is the permanent of which all specific sensations are but variations:

Understanding is required for all experience and for its possibility. Its primary contribution does not consist in making the representation of objects distinct, but in making the representation of an object possible at all. This it does by carrying the time-order over into the appearances and their existence. For to each of them, [viewed] as [a] consequent, it assigns, through relation to the preceding appearances, a position determined a priori in time. Otherwise, they would not accord with time itself, which [in] a priori [fashion] determines the position of all its parts. (A 199-200; B 244-245)

Thus the invariability of time-position seems to be a characteristic of a causal sequence. But Kant goes on to quickly point out that absolute time is not itself an object of our perception, and that we cannot, therefore, relate appearances to it as though we could place time and the series of appearances side by side. (A 200; B 245) He then adds the

odd statement that "the appearances must determine for one another their position in time, and make their time-order a necessary order."

How can appearances, of all things, determine their own time-order? A sentence later Kant adds:

A series of appearances thus arises which, with the aid of the understanding, produces and makes necessary the same order and continuous connection in the series of possible perceptions as is met with a priori in time.... (A 200; B 245)

The clue seems to be this: somehow, appearances themselves contribute something which together with something contributed by the understanding forms a necessary and connected order in the series of possible perceptions. And this is reinforced by part of the statement quoted earlier, namely "The objective succession will... consist in that order of the manifold of appearance according to which, in conformity with a rule the apprehension of that which happens follows upon the apprehension of that which precedes." (A 198; B 234) That is, objective succession has two components, the order of the manifold, which is determined by the appearances themselves, since it is contingent, and conformity to a rule.

The use of "appearances" is particularly significant, since it is clear (A 190-191; B 235-236) that Kant is not talking about the simple manifold of sense. In fact, he refers several times to the manifold belonging to this or that appearance. Appearances, then, can be taken here in their

supra-possible experience sense; they are the phenomena that constitute the world, the objects and events that, according to Kant, must be viewed for epistemological purposes as nothing in and of themselves but appearances of a we-know-not-what substrate.¹⁴⁹ Appearances, then, are the totality of the objects and events of the world.

One objection to this may be that if appearances, or the order of the manifold, are what determine whether ships sailing down stream are events not states, and that causality is a rule in accordance with which this is determined, shall we say, the transcendental bin into which all events are sorted, then are we not back to an essentially Humean formulation wherein experience is all and causality is a mere rule, an analytical proposition, that is pasted upon experience to yield events? The avoidance of reduction to analyticity, a key part of refuting scepticism, exists precisely because causality is not a rule or a concept in the ordinary sense. It goes through three definitions in the Critique, two of which remain at the analytic level, while the third becomes synthetic (but remains a priori) because rather than relating to concepts alone, it relates to a pure intuition, namely, time.

These are the three levels in the fashioning of causal succession in possible experience:

¹⁴⁹Which is a purely limiting concept; I do not mean to claim content for this notion in any way, and its emptiness or significance is not relevant for my purposes.

1. The logical concept of ground and consequent.
2. The category of cause and effect.
3. The schematism of the category with appearances through succession in time.

In the last, time is a continuum, as was shown in the First Analogy. There is no meaningful sense in which gaps can be thought in time; it is the permanence underlying variation. The First Analogy addresses the permanence, while the Second and third Analogies address the variation; the one addressing variation as events and the other addressing it as objects. In practice, of course, one assumes that the schemas of causality and reciprocity would combine somewhat, since events are usually made up of objects, many of which exhibit reciprocity (such as the ship going downstream; the ship itself exhibits reciprocity or community, or, to be more precise, becomes possible as object through this schema, although its going downstream is an event subject to the schema of causality).

The point is, event-variation is succession in time, but, since, as Kant points out, pure time, as the permanent, is not available for our inspection, only the variation (the appearances themselves) is what can constitute the causal succession. Now, the mere presence of variation as the manifold of sense guarantees the validity of the Second and Third Analogies; what it does not do is allow for their differentiation as succession and co-existence. All

presentation of the manifold of sense is successive (the so-called subjective succession); how do we extract the "really" successive? That is, how do we know when causality should be operative, and when co-existence should be? Kant says it's the appearances that determine the actual succession; why not take him at face value, for once, and assume that he really meant that we distinguish succession and co-existence through appearances, i.e., empirically.

But, objects a critic, he is looking for a transcendental solution, governed by synthesis a priori, not a lowly empirical solution. Is there a way of preserving the transcendental of the Second Analogy while allowing for the empirical component?

Causality has been determined, as we saw, at the logical level through ground and consequence. As a pure category, it is determined as cause and effect; here we have a potential synthesis a priori, since, as Hume has already shown us, we are going beyond one concept and connecting with another, but not, as he himself showed, from experience. Is this not transcendental aplenty? As pure category causality is already transcendental; it provides one of the formal grounds for the possibility of experience. In its schematization, however, it is being configured to the manifold of sense via the pure structure of sense, time, making the category into an actual synthesis a priori. But since this pure structure is unavailable in its pure form (it always comes loaded with

sense-data), it is reasonable to assume that in any intertwining of time and causation, our pure category will become crusted with the manifold of sense, which is the whole purpose of schematization after all. This being the case, the third level of causality, its schematized existence, is a level wherein empirical unity becomes a necessary component of the determination of the specific order of our perceptions, although such unity need not be confused with the categorial structure of causality which is not empirical.

The significance of the schematized category is that it "pulls out" in pure form what the manifold of sense is itself embedded in, namely, time. My main criticism here of Kant is that he focuses on time to the virtual exclusion of space, with some exceptions, when the Analogies could be arranged very neatly as 1) space and time in combination in the First Analogy¹⁵⁰ which gives us permanence and unity, 2) time in the Second Analogy which gives us successive variation or change, and 3) space in the Third Analogy, which gives us interactive variation or change (since objects, though not

¹⁵⁰J.A. Brunton goes even further than this, wishing Kant had fully realized that "Space, and not some mysterious quantum, is the natural transcendental correlate for empirical quasi-permanence in the First Analogy." J.A. Brunton, "The Second Analogy and Levels of Argument. Some reflections inspired by Mr. Gerd Buchdahl," Kant-Studien Vol.62, cumulative ed. (1971): 388. Such a strong formulation, however, might pose some problems for the formulations of succession in the Second Analogy, whereas a space-time combination in the First Analogy would allow for a fairly natural sub-division into time and space in the Second and Third Analogies respectively.

change in the sense of succession, are change in the field of the permanent).¹⁵¹

This scheme, though not necessarily Kant's, would work out the problem of the Second Analogy along these lines: the rule, in accordance with which the manifold gives us a succession, is simply the succession of our perceptions. Now this seems virtually heretical, since Kant speaks quite clearly of differentiating a succession of perceptions from perception of a succession, which latter is the perception of a causal sequence. Nevertheless, on the above interpretation, perception of a succession would involve both the schematized category as well as the empirically-ordered manifold of sense, while the succession of perceptions, the normal order of all our perceptions when undifferentiated into events and states, is the schematized category by itself, as the pure flow of time in which perceptions are embedded, without the aid of the empirically-ordered manifold.

But how, objects our critic, can we talk in any fashion of the empirically-ordered manifold of sense? Is this empirical order not the problem in the first place? The answer to the second question is that it is not the problem at all. Making empirical judgments per se was never the point at issue

¹⁵¹Paul Guyer stresses the centrality of space in the Third Analogy, and Kant's own re-formulation in order to stress this in the B edition. Guyer, Claims of Knowledge, 267-268.

between Kant and Hume re causality.¹⁵² The answer to the first question is that the question of empirical unity is separately dealt with by Kant in the Critique of Pure Reason as well as the Critique of Judgment. In the latter especially, he explores a form of transcendentalism or synthesis a priori which provides empirical coherence without determining appearances; this is the use of the reflective judgment, which provides us with a constructive device for considering nature as amenable to our knowledge. This in no way constrains appearances, but satisfies the subjective movement of our thought; similarly, by recognizing the relevance of reflective judgment in the Second Analogy, empirical coherence begins to play a larger role in the problem of the Analogy.

This does cast up a further problem, however. If there is a non-determinative (read: non-constitutive) component to the Second Analogy, how can we say the Analogy is constitutive of possible experience? Can we transform the regulative character of reflective judgment in such a fashion as to make it work constitutively in the Analogy? This has been the contention of a couple of commentators who, having seen the role that empirical coherence plays in the Second Analogy, infer the necessity of introducing reflective judgment as one of the components of possible experience.

¹⁵²Although naturally Hume has a problem about the context of making empirical cognitive claims at all, namely, his problem of induction.

George Schrader, for example, contends that a certain neglect of empirical concepts in the Critique of Pure Reason leads to lacunae in Kant's formulation of the schematized categories:

In the First Critique Kant had offered only a very general and formalistic explanation of empirical concepts. He had argued that all a priori categories and principles represent modes of time determination and are thus in principle applicable to an empirically given time content. But... this is a necessary but not a sufficient condition for the full schematization of a priori categories. The unanalyzed question is: what is presupposed in the empirically given itself, over and above the fact that it is spatial and temporal, with respect to objective knowledge?¹⁵³

Now Schrader is already talking about knowledge, not simply the construction of experience, but aside from that his argument about time determination not being a sufficient condition for the full schematization of the categories turns on the argument that the Critique of Pure Reason does not successfully construct possible experience all-inclusively. This, in turn, rests upon Kant's explicit statements about so-called uncategorized perceptions, which then challenge the universal validity of the categories. The best example is at A112, "a blind play of representations, less even than a dream", and there is a section at A90-91, B123, which, although Schrader does not cite it in this context, is another occasion where Kant reflects on uncategorized sensations.

This is a serious objection, and not merely because it challenges the formalism of the First Critique. If Kant

¹⁵³Schrader, 211.

admits uncategorized sensation into the scheme of the Critique of Pure Reason then his entire project is confounded from the start, for the whole point about the categories is their apriority, as well as their syntheticity, i.e., their universality and necessity. Thus Kant is committed to saying that all sensations we receive are subject to the categories; they, along with the pure intuitions of space and time, structure possible experience. Nevertheless, Kant does make statements about possible uncategorized sensation.¹⁵⁴

All this notwithstanding, when the passages in question are examined, what one finds is that they can easily be construed to suggest rhetorical statements that are actually intended to emphasize the universality of the categories. And the one passage not so susceptible of such construal, namely A653-654, B681-682, refers to the possibility that the world might be not susceptible of being known, not that it might be uncategorized.

I think Schrader's point also rests on passing from possible to actual experience, and the latter has a great deal to do with empirical coherence, and, therefore, with

¹⁵⁴Martin Kalin uses these statements against Kant as well, but for a somewhat different purpose. He tries to show that the Lewis-Lovejoy criticism of the Second Analogy, that it proves causation by reducing it to a tautology, is valid, and one of his key arguments is Kant's seeming admission of non-categorized sensation. Kalin, 324-326.

reflective judgment.¹⁵⁵ But he seems to be also confusing the role that sensations play in awakening the use of the categories and in providing the material that streams into them, with some structural a priori role. It is quite true that "the empirical manifold provides the necessary filling to hold the skeleton together,"¹⁵⁶ but that does not, following out the metaphor, mean that the empirical manifold is the skeleton itself. And for the purposes of the Critique of Pure Reason, at least insofar as it is considered a response to Hume's scepticism about causality, the skeleton is all that is needed to be constructed. Where Schrader is correct is in saying that the dynamics of empirical unity need further investigation; such investigation is legitimate enough, since, on this interpretation at least, empirical ordering plays a

¹⁵⁵I think one can say that the principles of the understanding govern possible experience, that those of judgment govern actual experience, and that the principles of pure reason govern necessary "experience", i.e., moral experience, perhaps more properly the instantiation of morality in experience. There is some support in the Critique for this; when discussing the modality of judgments in general, Kant correlates problematic, assertoric, and apodeictic judgments with the possible, the real, and the necessary, respectively. (A 74-45; B 100) He then remarks in a note: "Just as if thought were in the problematic a function of the understanding; in the assertoric, of the faculty of judgment; in the apodeictic, of reason." After this he adds elliptically that "[t]his is a remark which will be explained in the sequel." (A 76; B 101) This passage also indicates Kant's "Critique of Pure Reason" awareness of judgment, as distinct from reason and understanding, and suggests that the real place for the inclusion of reflective judgment might have been among the fourth set of schematized categories, the Postulates of Empirical Thought.

¹⁵⁶Schrader, 213.

role in the construction of experience. It is just not the synthetic a priori component of such construction, i.e., it is not part of possible experience.

Another commentator, Frederick Van De Pitte, follows the general pattern of Schrader's argument but makes a far stronger claim; he wants to make purposiveness without purpose, the principle of reflective judgment, into a constitutive element forming part of the first Critique. Of course he realizes that this is not Kant's position, but argues that Kant loses little by such an inclusion, which would take the interesting form of making purposiveness a pure intuition along with space and time.¹⁵⁷ The objections to Schrader apply equally to his position, with the added problem that making purposiveness constitutive after the fashion of the schematized categories, leaves the Kantian position weighted down with such strong claims about our ordering of the manifold, that it easily sinks under the thrust of the sceptic's rapier.

Felix Duque offers an analysis that proceeds along the same lines as Schrader and Van De Pitte but with an eye to slightly different issues. In his discussion of the possible role of matter and materiality in Kant's philosophy, particularly in the Opus postumum, Duque starts off by asking

¹⁵⁷Frederick P. Van De Pitte, "The Role of Teleology in Kant's Work," in Reflections on Kant's Philosophy, ed. W.H. Werkmeister (Gainesville: University Presses of Florida, 1975).

whence comes the relationship between the empirical affinity of objects and the transcendental affinity under which the former must always stand?¹⁵⁸ Having followed Kant's answer up to its conclusion in the assertion of a transcendental object that equals X, Duque points out rather astutely that "Aber von diesem ,X' ist eben gerade jenes verschwunden, das es zu subsumieren galt: die empirische Affinität (d.h. das Ubereinstimmen der gegebenen heterogenen Stoffe)."¹⁵⁹ That is, the transcendental object works only by jettisoning the very manifoldness of empirical association that was a problem in the first place.

There is a principle of such affinity in the Ideas of Pure Reason, as Duque admits, but this is still a matter of logical affinity, pure reason in its relationship to itself; it does not function directly in application to empirical objects. What does is the principle of purposiveness, whereby empirical objects are thought regulatively in a unity of nature as a whole through the reflective judgment.

Now Duque's argument as a whole is, like Schrader's, not fallacious in general. Like Schrader he sees that empirical unity or affinity, what I call empirical order, plays a role in the Analogies:

Die Zeit als Form (als reine Anschauung) ist also Garant der Anwendung der Kategorie auf die

¹⁵⁸Felix Duque, "Teleologie und Leiblichkeit beim späten Kant," Kant-Studien, cumulative ed. (1984): 381.

¹⁵⁹Duque, 382.

Erscheinungen. Es scheint, dass wir schliesslich auf Grund gestossen sind. Doch haben wir etwas vergessen. Denn die Zeit kann nicht bestimmt werden, ohne die Voraus-Setzung, dass es in den Erscheinungen selbst eine Wiederholbarkeit des Ähnlichen gibt, was den Inhalt betrifft (A654/B682). Es ist wahr, dass dies etwas ist, dem wir beim empirischen Geschehen begegnen. Aber nichts garantiert, dass dies auch in Zukunft der Fall sein wird (das Induktionsproblem). Man beachte einen wesentlichen Punkt: diese Voraussetzung folgt weder aus dem Satze vom Grund, noch aus der Beschaffenheit der Zeit: im Gegenteil, sie sieht wie die Ermöglichung der beiden ersten aus.¹⁶⁰

Now it is true that one does not have the schema of time if you do not have the manifold of sensibility, though it is independent of this or that part of sensibility. This necessity for sensibility is what removes causality from the analytic realm, since on an analytic interpretation causation should be valid independent of any experience whatsoever (though empty on that account as well); whereas it is synthetic because it requires sensibility as the X by which the proposition becomes valid, that is, it requires an element that is fundamentally contingent; but it is a priori because it is independent of this or that sense perception, this or that experience.

As Hume showed, every effect has a cause, by definition, but not every thing has to have a cause; however, if we tack on to "thing" the qualifier "which comes within the range of our sensibility" then every thing does have a cause, since its place in the schematization of time requires its linkage with

¹⁶⁰Duque, 383.

another object; it is just this lack of linkage that is the basis of Hume's thrust against causality, i.e., his atomism. In one sense this linkage is analytic; it follows from a qualified definition. However, since the qualifier is transcendentally contingent, that is, it is contingent only as a whole, the linkage is really synthetic. But because it is not empirically contingent, that is, contingent in the way this or that part of empirical reality is contingent, it is a priori.

Nevertheless the need for sensibility must not be inflated into a larger need than that specified by the Critique of Pure Reason. The citation Duque gives in the previous reference concerns the well-known passage at A 653-654, B 681-682, where Kant stresses the need for experience to exhibit homogeneity so that the understanding's concepts can operate. Now the actual concept he cites is the the law of genera; this sort of law seems quite different from the categories, not necessarily in form, for it bears a strong conceptual resemblance to the category of unity,¹⁶¹ but because it has more to do with the knowledge of experience than its constituting. Also, the transcendental presupposition for such a concept, namely, the principle of homogeneity, is an Idea of pure reason, albeit a regulative

¹⁶¹All three Ideas of reason, homogeneity (the transcendental principle of the law of genera), specificity, and affinity, bear a striking resemblance to the first set of categories, unity, plurality, and totality.

idea. The fact of its regulativeness should be a clue to Kant's meaning; one must presume that he has not suddenly decided to abandon the notion that the categories are constitutive of experience, so what would he be about in allowing a regulative idea in as part of such constituting? And yet, on Duque's account, this is what Kant is doing, at least, implicitly. Moreover, there is some support for his point in the text, particularly when Kant says, in the same place, that "homogeneity is necessarily presupposed in the manifold of possible experience... for in the absence of homogeneity, no empirical concepts, and therefore no experience, would be possible." (A 653-654, B 681-682)

One tempting way out of this textual corner is to say that Kant is operating with a sense of experience and the understanding which is different from the senses in the *Analytic*, i.e., this is experience already constituted through the schematized categories and this is the understanding in its specific cognitive employment, not its transcendental one. However, such charges should only be a last refuge in an argument. Therefore, a better argument against Duque is similar to the ones against Schrader, namely, that yes, empirical unity or homogeneity (and specificity and affinity) plays a part in the construction of experience, but that this part pertains to actual experience, not possible experience, and that when Kant talks of the "manifold of possible experience" he means exactly that; the manifold that possible

experience works with to create actual experience, the manifold of possible experience, not the manifold that is or constitutes possible experience, for what sense would there be to a manifold being itself possible?

This does generate another problem, since on the above interpretation, empirical ordering, the order given by the appearances themselves, is important for the categories, specifically for the distinguishing of events and states. A strong objection to this is that empirical ordering, for example, that ships go downstream or that houses stay in one place, is really part of actual, not possible experience. If it is part of actual experience, how can it be a component of the structure of possible experience by which it was structured in the first place?

The response to this criticism is two-fold. First of all, in some kind of temporal sense, say, when investigating the anthropology of experience, the first items in the course of experience must be sensations or representations, as Kant himself admits. (B 1) As they bombard our senses we eventually begin to synthesize them, some as events, some as states, and which ones become which is an entirely contingent matter. In this genesis of experience, causality and co-existence evolve out of our perception of the manifold of sense, very likely after the fashion that Hume described for causation. But this is only their context of discovery or context of genesis. Their context of justification has not

been supplied at all, and this is what the sceptical question turns on. Kant need not bother about whether the category or the empirical object appeared first, for this is not the thrust of the sceptical problem.

This brings us to the second part of the response. The apriority of causality is not a temporal priority wherein first one has cause-and-effect and then, having subdued the manifold of sense to this rough magic, one obtains events. That would make the Critique of Pure Reason a discussion of psychology. The apriority of causality lies in its independence from experience in the context of justification, just as its synthetic nature lies in its applicability to sensation, again, in the context of justification. This is, at one and the same time, a good reason for accepting the role that empirical ordering plays in the Analogies, a role crucial to the actualizing of experience, while at the same time rejecting its claim to being part of the a priori structure, the latter being solely composed of the categories schematized onto space and time, i.e., possible experience. Therefore, with regard to discriminating objects or events, one could say that the possibility of discriminating them is a function of representations being embedded in space and time but that, as previously argued,¹⁶² the actuality of such discriminating involves empirical ordering and the principle of such

¹⁶²See above, 103-104.

ordering, namely, the systematic principle that the future resembles the past.

What this means, in effect, is that the generation of the pure schemas of time and space (admittedly not Kant's explicit statement but strongly implicit in the Analogies) is all that he needs for his response to scepticism re causality, since this response does not involve an appeal to empirical realities, which Hume was not questioning anyway. Hume questions the applicability of the a priori concept of causality; Kant shows that it "applies," because it is a part of empirical sensation (i.e. it is pure succession in time in the context of which the empirical is a variation on what is permanent) and that it is a priori because it is independent of this or that particular experience (though not of all experience). So this means a slight alteration of some of the above statements. The classification of specific appearances as events or states is the process of actual experience, and consists of empirical ordering brought under certain rules, the latter being pure succession in time and pure extension in space re events and states respectively. But the generation of these rules, i.e., the schematization of the third set of categories with time, and, on this interpretation, with space as well, is the construction of possible experience.¹⁶³

¹⁶³So that, on this interpretation, the main problem with the Second and Third Analogies is Kant's use of examples in them, since any example would exhibit that union of empiricity and categories that makes up actual experience, whereas the discussion is supposed to be confined to possible

This is an admittedly weak formulation of possible experience, but one which avoids some of the problems traditionally associated with the Second Analogy.¹⁶⁴ It would have more clear-cut support if the role played by appearances in the Second and Third Analogies could have been very clearly spelled out, although the fact that variation plays no part in the First Analogy but such a great part in the others, should be taken as the clue to the problem, since where variation is, empiricity must not be far behind.

However, by far the most significant clue to the role of empirical ordering is Kant's discussion of it in the Dialectic, where he discusses the dependency of knowledge upon empirical coherence and, in passing, refers to the dependency of the structure of experience upon it as well, a dependency,

experience. Which is why, presumably, we should take the examples as just that, not demonstrations or even illustrations, in any sense, but as themselves being analogies of a certain sort, designed to convey what cannot be illustratively conveyed since we only have access to actual and not simply possible experience.

¹⁶⁴A great deal of my argument is bound up with the relationship between the Analogies and their categorization of experience and the fourth set of schematized categories, the Postulates of Empirical Thought. It becomes, it seems to me, even clearer here that Kant is arguing for a very weak conception of the construction of possible experience; this, however, is too extensive to be systematically discussed here. For a discussion of the notion of possible experience in a far stronger sense than the one presented here, particularly in the Postulates, see Bella K. Milmed, "'Possible Experience' and Recent Interpretations of Kant." in Kant Studies Today, ed. Lewis White Beck (LaSalle, Illinois: Open Court, 1969). It seems to me, though, that her discussion of possible experience conflates the general notion that is the leitmotif of the Analytic, with the postulate of possible experience in its application to actual objects. See Milmed, 316.

however, which must be taken as genetic, temporal, and actual, not transcendental or possible, although Kant does not explicitly make the distinction in the given passage.

CHAPTER FOUR

'THE PROBLEM OF KNOWLEDGE IN THE CRITIQUE OF PURE REASON

As the previous section indicated, causality serves as one of the structures of empirical consciousness in general terms, giving it a conceptual basis rooted in time. It does not validate what we would normally think of as an objective order in our perceptions; that is, an order validated intersubjectively, inductively, or scientifically. This type of order is validated by actual experience, whether simple or sophisticated, which is itself structured, in a general sense, by the principle of induction; in the case of science, which is a sophisticated version of actual experience bordering possibly on necessary experience with regard to fundamental laws, it is further validated by controlled experiment and the coherent systematization of laws. The principle of induction allows us to say that past experience is a basis for the prediction of future experience and is therefore a guarantor of the objective, concretely inter-subjective order.

What is this principle of induction based on? It is not a principle of possible experience in the way that causality is, but rather a principle of the systematization of knowledge. It construes nature as a harmonious totality, intrinsically susceptible of being known by us. This view of

nature is developed in the Critique of Judgment, and is based upon the critical notion of a natural purposiveness or ordering. Nevertheless, the notion of nature as an ordered totality already arises in the latter part of the Transcendental Doctrine of Elements, that is, the Transcendental Dialectic, and Kant indicates that it is necessary for theoretical purposes. This anticipation of the doctrine of the Critique of Judgment by the Critique of Pure Reason is not developed in terms of the faculty of judgment, however, but is discussed along the lines of the natural inclinations of pure reason. As will be seen, this leads to the development of a more teleological conception of nature's totality than the later conception of the Critique of Judgment. In the next chapter we shall see that the teleological conception of purposiveness still has a strong hold on Kant's conception of the judgment, even though he is also evolving a more critical conception of nature's totality.¹⁶⁵

In this chapter the principles of pure reason, which generate the empirical unity necessary for knowledge and actual experience, will be briefly discussed; a number of reasons will be given to show that Kant's account of empirical

¹⁶⁵This distinction between the 1st. Critique's teleological conception of purposiveness and the 3rd. Critique's more critical one is that of H. W. Cassirer. However, he does not seem to notice that the former conception carries over into the 3rd. Critique. H. W. Cassirer, Kant's First Critique, (London: George Allen & Unwin Ltd., 1954) 342-357.

ordering in these principles is less satisfactory than his later account of empirical ordering in the Critique of Judgment.

Transcendental Illusion

Kant opens the Dialectic with a discussion of transcendental illusion. About illusion in general he says in Augustinian fashion that

Truth or illusion is not in the object, in so far as it is intuited, but in the judgment about it, in so far as it is thought[.] It is therefore correct to say that the senses do not err - not because they always judge rightly but because they do not judge at all. Truth and error, therefore, and consequently also illusion as leading to error, are only to be found in the judgment, i.e. only in the relation of the object to our understanding. (A 293; B 350)

Thus, neither the understanding nor the senses could by themselves fall into error. Kant concludes therefore that

Since we have no source of knowledge besides these two, it follows that error is brought about solely by the unobserved influence of sensibility on the understanding, through which it happens that the subjective grounds of the judgment enter into union with the objective grounds and make these latter deviate from their true function.... (A 294; B 350-351)

The influence thus brought to bear in the case of transcendental illusion is one in which we "take the subjective necessity of a connection of our concepts, which is to the advantage of the understanding, for an objective necessity in the determination of things in themselves." (A 297; B 353) This happens when we employ principles that

transcend the limits of possible experience,¹⁶⁶ insofar as no object of possible experience is adequate to them. The employment of these principles, as Kant will argue, is absolutely necessary for systematic knowledge, but we constantly fall into dialectical, transcendental illusion when we do so. The resolution of this seeming dilemma is the task of the Transcendental Dialectic, and the role of transcendental idealism in general.

The principles or ideas in question are those of the unity of the subject, the totality of appearances or of the world, and the absolute unity of things in general. In all of these ideas, pure reason strives "to ascend from the conditioned synthesis, to which the understanding always remains restricted, to the unconditioned, which understanding can never reach." (A 333; B 390) That is, from concepts applicable in some way to experience, reason demands an

¹⁶⁶Jonathan Bennett says of these transcendent principles that "[i]n fact, Kant has no transcendent principles to offer us. Each time he purports to do so, he weakens the meaning of 'transcendent', sometimes muddying the waters in other ways as well." Jonathan Bennett, Kant's Dialectic, (Cambridge: Cambridge University Press, 1974) 267. If Bennett means any principles apart from those presented by Kant in the Antinomies and the Ideal of Pure Reason, then he is correct. However, the so-called transcendent ideas do exist in the Critique; they are any and all of the ideas presented in those two sections taken as constitutive rather than as regulative. So that there are not two sets of ideas, one transcendent and illusory and the other regulative and knowledge-yielding, but rather one set of ideas, with two faces, the Jekyll face of regulative reason and the Hyde face of transcendence. (The principles discussed in the Paralogisms, on the other hand, do not have any such cognitive value, since what they could yield, the unity of the cognizing subject, has been dealt with in the Analytic.)

absolute extension or totalizing of the same, which, since absoluteness or totality is not an object of experience, whether actual or possible, results in the concepts being illegitimately used.

When the transcendental subject, the non-cognizable referent for all our perceptions as described in the Analytic, is expanded in this fashion, it becomes a real simple subject and leads to the Paralogisms of pure reason, whereby a purely empty notion, having no empirical content, is affirmed as a real part of experience. When the totality of appearances is taken to be a real possibility, then reason falls into contradiction with itself, leading to the Antinomies of pure reason. And when the absolute unity of everything in general is posited as real, then we have the notion of God as really existent, the Ideal of pure reason, where reason has to find a proof of the existence of such an ideal.

In the first case, the concept of the subject is empty, having no empirical content that could justify us in using it as a real concept. In the second case, it is even worse, since in positing the totality of appearances, reason finds that equally valid arguments can be given for both the theses and antitheses of each of the Antinomies.¹⁶⁷ In the third

¹⁶⁷The theses are: The beginning of the world in time and its extension in space; the reduction of the world into simple parts; the existence of a causality of freedom alongside of the causality of nature; and the existence of an absolutely necessary being, i.e. God. The antitheses take an opposing view on each of these.

case, reason is unable to find proofs for the existence of an Ideal Being.¹⁶⁸ Thus, in trying to find an object for its cognitive employment, in being constitutive, reason falls into dialectical illusion, particularly in the Antinomies, where its ideas are not simply empty, but where reason becomes self-contradictory.

However, if reason gives up any pretensions to constituting cognitive objects, it can play an important regulative function in the Kantian architectonic. This use arises out of the distinction between the understanding, the faculty of rules, and reason, the faculty of principles. (A 299; B 356) The latter supplies us with propositions derived purely from concepts, something that the understanding is not in a position to do because of its reliance on intuition to prove its principles:

If we consider them in themselves in relation to their origin, these fundamental propositions of pure understanding are anything rather than knowledge based on concepts. For they would not even be possible a priori, if we were not supported by pure intuition (in mathematics), or by conditions of a possible experience in general. That everything that happens has a cause cannot be inferred merely from the concept of happening in general; on the contrary, it is this fundamental proposition which shows how in regard to that which happens we are in a position to obtain in experience any concept whatsoever that is really determinate. (A 301; B 357)

¹⁶⁸Kant's discussions of the proofs of God's existence are among the most famous of such discussions, particularly his refutation of the ontological argument. For the purposes of this discussion, however, the important feature of Kant's discussion is his partiality for the argument from design, a partiality that becomes extremely important in the latter part of the Critique of Judgment.

The relationship between the propositions derived via reason and the principles of the understanding is that the understanding unifies appearances through rules, while reason unifies these rules through principles. (A 302; B 359) The principle of reason in this activity is that "multiplicity of rules and unity of principles" (A 305; B 362) are required by reason for making the understanding consistent with itself. However, since reason does not deal directly with appearances, such activity does not bear upon objects, that is, the objects of experience. Moreover, as the section on phenomena and noumena indicates, there are no other objects that could fall under the special jurisdiction of reason, at least as concerns knowledge.¹⁶⁹ Therefore the principle of reason in unifying the understanding has no reference to objects:

Such a principle does not prescribe any law for objects, and does not contain any general ground of the possibility of knowing or of determining objects as such; it is merely a subjective law for the orderly management of the possessions of our understanding, that by comparison of its concepts it may reduce them to the smallest possible number; it does not justify us in demanding from the objects such uniformity as will minister to the convenience and extension of our understanding; and we may not, therefore, ascribe to the maxim any objective validity. (A 306; B 362-363)

This limitation on the general principle of reason is also the limit that Kant will set to reflective judgment in the Critique of Judgment, and the function of reason as the housekeeper of the understanding is very similar to the function of reflective judgment in knowledge, particularly

¹⁶⁹See above, Chapter 2.

scientific knowledge. However, as will be seen, the "orderly management of the possessions" of knowledge has an empirical component to it that pure reason lacks, and such management includes the imposition upon objects of the very uniformity that Kant says we cannot demand from them in order to "minister to the convenience and extension of our understanding". The convenience and extension of knowledge does require, if not a demand, then an ascription of this uniformity, and only the regulative nature of such an ascription gives it another point of similarity with the activity of pure reason.

What the principle of uniformity does have most clearly in common with the principle of pure reason is the totality that both principles require. As we shall see in the next chapter, the purposiveness without purpose that the reflective judgment ascribes to nature is a totalizing description, which purports to judge nature as a totality, rather than as an unfinished aggregate. This totality is also governed by laws, in the way an organic body is. The purposiveness that is ascribed to organic life has this as well in common with the purposiveness of total nature; an organism cannot be thought as a mere aggregate of parts, while nature is not a mere aggregate of experiences. Just as the former is a structure made sensible by reference to the whole, so is the latter made organizable for the purposes of scientific knowledge in general, only through the conception of its totality, a

conception deriving from the notion of its being shot through with teleological function.

The Regulative Use of Pure Reason

What Kant has shown in the section on the Antinomies, is that the ideas of the objects with which the opposing points of view are concerned, are too large for the parameters of possible experience but are far from being fictitious in the sense of invented or arbitrary:

The ideas are such that an object congruent with them can never be given in any possible experience, and that even in thought reason is unable to bring them into harmony with the universal laws of nature. Yet they are not arbitrarily conceived. Reason, in the continuous advance of empirical synthesis, is necessarily led up to them whenever it endeavours to free from all conditions and apprehend in its unconditioned totality that which according to the rules of experience can never be determined save as conditioned. (A 462; B 490)

Here Kant still speaks of freeing the conditioned from all conditions as being a situation where one uses these ideas of totality. Later, in formulating the regulative principle of pure reason, he addresses the use of the notion of the unconditioned within the empirical synthesis. This is the use of totality and interconnectedness that underlies the notion of purposiveness without purpose, which allows us to further our knowledge using a secure principle of induction, namely that it is intelligible to speak of the past as a reliable guide to the future, although only in the most general sense.

What Kant also shows is that the principles of rationalism, the principles of the thesis, are popular, insofar as they are morally and intellectually satisfying. On the other hand, the principles of empiricism, the principles of the antithesis, are unpopular, because they take away from the basis of morality and are subtle, hard to comprehend, and do not give the ordinary understanding an unquestioned basis for their ideas. These characteristics stem from the sceptical thrust of empiricism, before which all ideas, no matter how grandiose, must retreat.

Nevertheless, the principles of the antithesis have this overwhelming attraction; within their parameters the understanding is on its own terrain.

According to the principle of empiricism the understanding is always on its own proper ground, namely, the field of genuinely possible experiences, investigating their laws, and by means of these laws affording indefinite extension to the sure and comprehensible knowledge which it supplies. Here every object, both in itself and in its relations, can and ought to be represented in intuition, or at least in concepts for which the corresponding images can be clearly and distinctly provided in given similar intuitions. There is no necessity to leave the chain of the natural order and to resort to ideas, the objects of which are not known, because, as mere thought-entities, they can never be given. (A 468-469; B 496-497)

This is as sound empiricist doctrine as any given by, say, the members of the Vienna Circle. Within the sphere of science the objects of intuition reign supreme, and all knowledge must be judged by its conformity to them. Where of course Kant departs from this is in the formulation of the parameters

within which science takes place, parameters that Hume had shown to be cognitively invalid themselves when examined from a sceptical, empiricist standpoint.

This is why Kant both favours empiricism while wishing it to remain confined to its proper domain; that of speculative knowledge; that is, science. Carried over into any other domain it produces disastrous scepticism for morality as well as cognitive scepticism. In the latter area the statements of the antithesis, since they forbid the introduction of the unconditioned, are a barrier to the systematization of knowledge:

Human reason is by nature architectonic. That is to say, it regards all our knowledge as belonging to a possible system, and therefore allows only such principles as do not at any rate make it impossible for any knowledge that we may attain to combine into a system with other knowledge. But the propositions of the antithesis are of such a kind that they render the completion of the edifice of knowledge quite impossible... Thus the architectonic interest of reason - the demand not for empirical but for pure a priori unity of reason - forms a natural recommendation for the assertions of the thesis. (A 474-475; B 502-503) [emphasis added]

The dilemma is that knowledge requires a firm foot on the solid ground of empiricism, while its systematization and interconnection require an immersion in the rarefied atmosphere of rationalism. While Kant should not be simply seen as mixing equal parts of empiricism and rationalism and coming up with the fiery brew of transcendental idealism, it can be claimed that he allocates a place for each in the scheme of knowledge. In so doing he separates two important

questions: How is knowledge possible empirically? and how is knowledge possible systematically? Empirically there seems no doubt that knowledge can only be accumulated and proven by the strictest adherence to scientifically controlled techniques of observation and induction. Of course the specific parameters of such scientific control, the theories that are the second level of such observation, are somewhat less empirically controlled, and, as Thomas Kuhn has asserted, at periods of scientific revolution they may depend more on shifts in scientific perspective than on masses of evidence based on strict empirical procedure.

Nevertheless, these theories ought to be placed on the empirical side of knowledge, since even Kuhn concedes that revolutionary shifts emerge on the basis of empirical anomaly and are subsequently validated (though not always completely) through empirical evidence.

Kant uses the ideas of pure reason to form a basis for the formulation of scientific laws, while at the same time addressing the question of empirical order that plays a role in the formation of actual experience. After the well-known passage in which he notes that absolute heterogeneity in the objects of experience would endanger both knowledge and that self-same experience (A 653-654; B 681-682), he introduces three transcendental principles of pure reason that will solve the problem of empirical ordering. The first, the principle of homogeneity, presupposes unity into higher genera in the

manifold of possible experience; the second, the principle of specificity, presupposes variety of lower species in the same; and the third, the principle of affinity or continuity, the product of the combination of the previous two, presupposes the gradual proceeding from lower to higher species, and thence to genera. (A 657-658; B 685-686)¹⁷⁰

These principles of pure reason are specifications of the general systematic employment of pure reason. When seeking objects for its ideas, pure reason falls into dialectic; when it uses its ideas subjectively, it is regulative. This is what Kant calls the hypothetical employment of reason. In this function, reason closely resembles what the Critique of Judgment calls reflective judgment;¹⁷¹ however, in some significant points hypothetical reason falls short of the uses of reflective judgment.

Kant refers to the logical employment of reason as the apodeictic use of reason; here reason "is a faculty of

¹⁷⁰There is a strong similarity between these three principles of pure reason and the first set of categories, those of Quantity, namely unity, plurality, and totality. It is not clear what their relationship is.

¹⁷¹J.J. Evans closely links the empirical employment of reason discussed in the Critique of Pure Reason to the role of reflective judgment in the Critique of Judgment. I agree that in both cases Kant is concerned with empiricity and that Evans is right to stress the continuity of theme; nevertheless, the nature of the task of reflective judgment is different from that of hypothetically employed reason in a number of crucial ways. J.J. Evans, "The Empirical Employment of Pure Reason," Proceedings of the Ottawa Congress on Kant in the Anglo-American and Continental Traditions. October 10-14, ed. Pierre Laberge, Francois Duchesneau, and Bryan E. Morrissey (Ottawa: The University of Ottawa Press, 1974).

deducing the particular from the universal, and if the universal is already certain in itself and given, only judgment is required to execute the process of subsumption, and the particular is thereby determined in a necessary manner." (A 654; B 674)¹⁷²

The hypothetical employment of reason, on the other hand, comes into play only when the universal is provisionally or problematically allowed, making it similar to the role of reflective judgment.

Nevertheless, the function of hypothetical reason is transferred in the Critique of Judgment to judgment, specifically reflective judgment. Kant restates the problem of heterogeneity in his First Introduction to the third Critique, and then assigns the former principles of hypothetical reason to reflective judgment in order to deal with this problem. (FI, C of J, 399-401) These principles become subsumed in reflective judgment under its general principle of systematic unity. This transferral of function notwithstanding, one can still ask whether there is really any difference between judgment so conceived and the hypothetical employment of reason, and whether, if different, the former should be preferred to the latter.

¹⁷²First of all, as will be seen in the next chapter, this definition of reason is identical to what Kant calls in the third Critique "determinant judgment." Second of all, if reason here is the faculty of such deduction, why is the actual job being delegated to judgment?

There are at least seven reasons for distinguishing Kant's version of systematic unity given in the Critique of Judgment from that given in the Critique of Pure Reason which are also reasons for preferring reflective judgment to the hypothetical employment of pure reason. Not all of them have equal conceptual weight, however.

The first is the fact reflective judgment grants faculty recognition to systematic unity, placing it in a specific mode of our cognitive powers rather than relegating it to the fringes of pure reason. By so doing, Kant also sheds more light on the nature of systematic unity in general; it is not merely the application of an idea of pure reason to the objects of experience, but part of the motive force of that faculty dealing with experience, namely, judgment. This brings me to the second reason. With the hypothetical employment of pure reason, systematic unity becomes a means of uniting varied laws under one principle, into as much unity as possible. With reflective judgment, this systematic unity is neither projected nor applied; it is set as a task. This follows from the divergent nature of hypothetically employed reason and reflective judgment. In the former, "the universal is admitted as problematic.... If it then appears that all particular instances which can be cited follow from the rule, we argue to its universality, and from this again to all particular instances, even to those which are not themselves given." (A 646-647; B 674-675) In the latter, "if only the

particular is given and judgment has to find the universal for it, then this power is merely reflective." (C of J, 19)

The third reason is that assigning systematicity to the faculty of judgment makes the principle and its use much more immanent than when it is assigned to the faculty of reason. Reason seeks the unconditioned, it transcends the limits of possible experience, and although this transcendence is mitigated by making its hypothetical employment regulative, the image is still one of a faculty occupied with what cannot be represented in experience. In one sense, this might make reason better fitted to the task of presupposing systematic unity, for systematic unity as such is not an object of possible experience. However, conceived as a task, rather than an object, even one regulatively conceived, systematic unity is better suited to an immanent faculty, like judgment, than to an intrinsically transcendent one such as reason.

The fourth reason concerns the relationship of both faculties to particulars of experience. As A.C. Genova points out, judgment starts from the bottom up, dealing with particulars,¹⁷³ whereas, on Kant's own definition (A 302; B 359), reason does not deal directly with experience at all, but only unifies the understanding, certainly so that the latter can unify experience, but the point being that reason itself does not do the dirty work of dealing with particulars.

¹⁷³A.C. Genova, "Kant's Complex Problem of Reflective Judgment," The Review of Metaphysics, vol. XXIII (June, 1970): 470, note 8.

Why this should be excepted in the case of its hypothetical employment is not clear, whereas there is no doubt that judgment deals with particulars, since, even when reason is functioning apodeictically (subsuming particulars under a given unproblematic universal), it is judgment that has to execute this subsumption. (A 646; B 674) Genova aptly characterizes judgment's activity of "reflectively locating a possible and relevant universal" as "assumption" rather than "subsumption."¹⁷⁴

The fifth and sixth reasons are less intrinsically compelling from the point of the epistemic problem, but they indicate the necessity of shifting the burden of systematicity from reason to judgment. The fifth reason for the shift is that, as McFarland points out,

In the Critique of Practical Reason Kant assigned a specific function to reason in its practical employment, and he now wishes clearly to distinguish reason as practical from the activity of scientific investigation by giving another name to the latter activity.¹⁷⁵

This would then, in addition to all the other reasons, be a sound terminological move on Kant's part. The sixth reason is the reason usually associated with the Critique of Judgment being "the crowning phase of the critical philosophy," namely, as Genova points out, that judgment as a separate faculty with a relationship to systematicity provides, if not a schema,

¹⁷⁴Genova, 463.

¹⁷⁵McFarland, Kant's Concept of Teleology, 80.

then a symbol for the transition from freedom to nature, since it is homogeneous with both.¹⁷⁶

The seventh and final reason for the necessity of judgment as the faculty containing the projected systematicity of nature, is one mentioned in the previous chapter.¹⁷⁷ There seems to be some textual support in the Critique of Pure Reason for the idea that understanding governs possible experience, judgment governs actual experience, and reason governs necessary experience. That is, they structure experience, knowledge, and moral life, respectively. For example, at A75-76, B100-101, the modal judgments in the problematic, assertoric, and apodeictic modes are in passing, and with considerable ambiguity, likened to the functions of understanding, judgment, and reason. As categories these judgments become renamed as possibility, actuality, and necessity, and their schematized versions are the Postulates of Empirical Thought. In explaining these schematized categories of modality Kant says:

Even when the concept of a thing is quite complete, I can still enquire whether this object is merely possible or is also actual, or if actual, whether it is not also necessary. No additional determinations are thereby thought in the object itself; the question is only how the object, together with all its determinations, is related to understanding and its empirical employment, to empirical judgment, and to reason in its application to experience. (A 219; B 266) [emphasis added]

¹⁷⁶Genova, 464-465.

¹⁷⁷See above, Chapter Three, 119, note 155.

This would seem to support the tripartite jurisdiction of the three faculties.

The reason for classifying actual experience under knowledge, would be the role of the empirically unified component in the construction of actual experience, a component, which, when designated as an extremely primitive and informal knowledge-system, would come under the jurisdiction of systematic unity; that is, the jurisdiction of judgment. Now, if necessary experience is confined to moral life, that is, to the categorical demand of the necessary objects of reason, then actual experience, which, thanks to its empirical component is not necessary as a whole, ought to be left to judgment.

The first four reasons given are the strongest as regards the function of systematicity, while the fifth and sixth, though possibly compelling on an inter-faculty perspective, are far less intrinsic to epistemic systematicity. The seventh reason would be more compelling if sufficient textual evidence were provided; without ample evidence, it is only speculatively interesting.

CHAPTER FIVE

THE PROBLEM OF KNOWLEDGE IN THE CRITIQUE OF JUDGMENT

The Critique of Pure Reason has dealt with the problem of the organization of experience; however, it has only provisionally dealt with the problem of knowledge. The solution to the problem of causality, the organization of experience by the schematized categories, is not by itself sufficient to justify the systematization of the world through knowledge. As A.D. Lindsay points out:

All thinking is and must be done according to the categories, but Kant has already observed in the first Critique that the mere application of the principles of pure understanding takes one a very little way towards the relation of the multiplicity of the given in an intelligible system.¹⁷⁸

He goes on to observe that although the categories are the common mental apparatus of us all, science requires the specialized use of that apparatus in order "to conceive universals, hypotheses, analogies, and principles, when ordinary men see nothing but a welter of facts."¹⁷⁹ This

¹⁷⁸Lindsay. 224.

¹⁷⁹Lindsay, 225. I would contend, however, that such specialized use of the cognitive apparatus takes place even in everyday ordering of experience, and that the categories by themselves are not sufficient for this. This expansion of the role of systematic knowledge is not, however, incompatible with Lindsay's point, once it is supposed that there is something between our common mental apparatus and scientific

observation is reiterated by J.D. McFarland in connection with the Second Analogy, his point being that the argument supporting causality is necessary but not sufficient for the construction of specific causal laws.¹⁸⁰ Following H.J. Paton he states:

The principle, 'Every event has a cause', neither guarantees nor justifies us in assuming either that regularities will occur in nature, or that those which have occurred in the past will continue to do so in the future. for neither assumption follows from that principle; and since both assumptions are essential presuppositions of scientific investigations of nature, the argument of the Second Analogy is not by itself sufficient to justify such investigations.¹⁸¹

Since Hume's challenge, as was discussed previously, was not only to causation per se but also to the principle of induction, this lacuna constitutes a serious demand upon Kant's system, one of which he was already aware in the Critique of Pure Reason:

If among the appearances which present themselves to us, there were so great a variety - I do not say in form, for in that respect the appearances might resemble one another; but in content, that is, in the manifoldness of the existing entities - that even the acutest human understanding could never by comparison of them detect the slightest similarity (a possibility

systematicity, something, in fact, which helps to construct the "welter of facts."

¹⁸⁰As was discussed in Chapter 3. However, McFarland's conception of what is accomplished by the categories is far stronger than mine, and so his view of reflective judgment endows it with an even weightier task: namely, that of providing a framework for scientific knowledge specifically, as opposed to any more informal system of knowledge, whose framework is supposed to have been already provided by the categories. McFarland, Kant's Concept of Teleology, 29.

¹⁸¹McFarland, Kant's Concept of Teleology, 11.

which is quite conceivable), the logical law of genera would have no sort of standing; we should not even have the concept of a genus, or indeed any other universal concept; and the understanding itself, which has to do solely with such concepts, would be non-existent. (A 653-654; B 681-682)¹⁸²

This problem, essentially the non-temporal formulation of the question of the resemblance of the future to the past, is dealt with in the Critique of Pure Reason by the hypothetical employment of pure reason, using the principles of homogeneity, specificity, and affinity. However, this resolution did not provide a completely satisfying answer to the problem of systematicity, and Kant deals with it again in the Critique of Judgment. He uses the principle of teleology, already mentioned in the first Critique, to do this, transforming it from a substantive principle into a principle of the faculty of judgment; and hence, into a principle of the organization of scientific knowledge and the motivation of aesthetic feeling.

Teleology in the Critique of Judgment

¹⁸²To resolve this question Kant invokes the transcendental principle of homogeneity which serves as the basis for the similarity of appearances; however, this principle, as was discussed in Chapter Four, is obviously one of the ancestors of reflective judgment, and just as reflective judgment is indeterminate, so is homogeneity, for, even though it is supposed to be present in nature, "we are not in a position to determine in a priori fashion its degree" (A 654; B 682). That is, general homogeneity will not allow us to determine nature specifically.

There are several sorts of teleology to be distinguished in the Critique of Judgment. There are aesthetic teleology and scientific teleology, broadly speaking; the latter is subdivided into the teleology of organic life and the teleology of general scientific judgment.

However, there is a third sort of teleology that creeps into this area; it is a sort of physico-teleology that uses the notion of the designed nature of the world as the basis for a metaphysics, which then serves as a propaedeutic to theology proper. Kant alternates between saying on the one hand that this physical teleology somehow "points" toward the supersensible reality beyond phenomena, i.e., the moral realm, and therefore to God as the exemplar of this realm, and hastening to add that this in no way implies some definite theoretical understanding of the world as designed, this latter assertion having already been given in the Critique of Pure Reason.

This might not seem all that relevant to the defence against scepticism procured by systematic finality except that Kant does drag in the designed-by-God aspect of purposiveness as a regulative part of the reflective judgment's use of systematic purposiveness.¹⁸³ It is hard to see what the aspect of design has to do with non-purposeful purposiveness,

¹⁸³It seems only too obvious that he does this, although H.W. Cassirer thinks that he has left the designed aspect, what he calls the "teleological" argument, back in the Dialectic of the Critique of Pure Reason. See H.W. Cassirer, Kant's First Critique, 342-357.

which in fact resembles the purposiveness of organic life insofar as the latter is organized life. Systematic purposiveness assumes that nature is also organized, and is thus susceptible of being cognized through scientific law; there is no need to make the argument stronger by suggesting that this notion of organization needs even a regulative notion of being designed by an intelligent being. After all, like organic life, one might better assume that nature is organized for itself, that organization is immanent to it. This is still not a constitutive notion, since we do not ever have the whole of nature before us to call organized, but it serves as an underpinning of scientific knowledge which does not then need the unnecessary metaphysical weight of even a regulative notion of a cosmic Designer. The fact that the content of the world is indeed amenable to the categories of understanding, not indeed as regards form but as concerns content, indicates that "The manifold of facts seems, as it were, to accomodate itself to our knowledge, to meet it halfway and to prove tractable to it."¹⁸⁴ Cassirer goes on to point out that the very contingency of such an accomodation is exactly what makes it purposive. He also points out that:

This purposiveness is "formal," since it does not relate directly to things and their inner nature, but rather to concepts and their connections in one [sic?] mind; but at the same time it is thoroughly objective in the sense that it undergirds nothing less than the

¹⁸⁴Ernst Cassirer, Kant's Life and Work, 293.

status of empirical science and the orientation of empirical research.¹⁸⁵

This kind of purposiveness is thoroughly immanent and bears no epistemic relationship to transcendent purposes. As we shall see, the immanence of the notion of purposiveness without purpose is expounded by Kant in one argument without any metaphysical trimmings such as the idea of nature designed by an intelligence; in another, design becomes part and parcel of the epistemological argument, though regulatively conceived.

Why this ballast? It is obvious that the reason Kant brings in this weighty metaphysical notion, when it is unnecessary for the relatively delicate task of underpinning scientific knowledge, is because he has a larger and loftier task in mind for the Critique of Judgment; as both Introductions to this Critique make clear, along with the chapter "Methodology of the Teleological Judgment," the enunciation of aesthetic and scientific teleology is designed not only for those specific purposes, but for the greater purpose of re-uniting the sundered realms of knowledge and morality, lending credence to R.A.C. Macmillan's entitling the third Critique the "crowning phase of the Critical philosophy."¹⁸⁶ This loftier purpose then becomes intertwined

¹⁸⁵Ernst Cassirer, Kant's Life and Work, 294.

¹⁸⁶MacMillan, of course, takes this purpose of the third Critique very seriously, ending his book with a panegyric on how Kant brings us in the Critique of Judgment to a sublime union with our Maker. See Macmillan, 339-347. However, McFarland argues, on a more prosaic level, that all Kant actually achieves is that nature as nature "is not

with the humbler task of the problem of knowledge, often to the detriment of the latter.

Intelligibility and Empirical Objects

Up until the Critique of Judgment Kant equates an intelligible cause or form with something that is non-empirical in character. In defining, for example, an intelligible cause he says:

Some among the natural causes have a faculty which is intelligible only, inasmuch as its determination to action never rests upon empirical conditions, but solely on grounds of understanding. (A 545; B 573)

Thus intelligibility has nothing to do with the empirical but solely to do with the understanding. In a positive sense, i.e., not merely as that which is non-sensible, the intelligible also has to do with the faculty of reason (as when we act morally and supply to the world a noumenal causality).

Of course the empirical world itself has an intelligible component, namely the pure forms or intuitions of space and time in which it is situated, and the pure categories, through whose schematizations it is synthesized into experience. However, the pure intuitions and the categories are completely

incompatible with a view of the world as a morally purposive whole. But that is far from having shown that the realm of nature and the realm of freedom are at last unified teleologically." McFarland, "The Bogus Unity of the Kantian Philosophy" Proceedings of the Ottawa Congress, 1974, 296.

formal; they abstract from the content of experience, since this can in no way be determined a priori. (It is worth remembering here that Kant does not at this juncture think a theory of taste possible)

Nevertheless, by the Critique of Judgment Kant seems to have changed his mind. The theory of taste that he propounds in the third Critique is one that has to take into account the empirical content of experience. But in true Kantian fashion this is not an exercise in induction; Kant wants to see if there is an intelligible and a priori structure to the content of experience that does not completely abstract from its specifics, i.e., instead of purely formal coherence he is looking for empirical coherence. But it will still be a formal empirical coherence, since it will claim universality and necessity.

Since his analysis deals with specific empirical content it cannot claim the compelling if austere authority commanded by the categories in the Critique of Pure Reason; nevertheless, Kant claims for the theories of taste and science an authority which is objective, but which cannot determine the objects of our experience (such privilege being accorded only to theoretical and practical reason).¹⁸⁷ This

¹⁸⁷Brittan's reminder that for Kant objectivity "requires objects, not a certain kind of evidence" is particularly relevant here; reflective judgment is objective insofar as it is valid for the objects of our knowledge. It lacks the "hard" objectivity of the categories, however, because this validity is completely indeterminate and cannot give the objects to us. Brittan, 12 (See also 22-31).

authority has solely to do with the internal cohering of taste and scientific knowledge. This is expounded in Kant's theory of reflective judgment which is a thoroughly updated version of the regulative employment of the ideas of pure reason described in the Transcendental Dialectic of the Critique of Pure Reason (A 642-702; B 670-730).

The Faculty of Judgment¹⁸⁸

Kant locates judgment between understanding and reason, and gives it the function of mediating between these. Previously, in the Critique of Pure Reason, Kant also gave judgment the function of subsuming, for example, intuitions under pure concepts; that is, judgment is involved in the application of the categories to experience. The Analytic of Principles is a description of a transcendental doctrine of judgment, insofar as judgment plays a fundamental, though purely functional, role in the project of the 1st. Critique:

The Analytic of Principles will therefore be a canon solely for judgment, instructing it how to apply to appearances the concepts of the understanding,

¹⁸⁸Kant refers to judgment in general in the Critique of Pure Reason as "a peculiar talent which can be practised only, and cannot be taught" and also as "the specific quality of so-called mother-wit...." (A 133; B 172). He goes on to say that the judgment can be guided in transcendental logic by determining the employment of the rules of the pure understanding which are then applied by judgment to appearances. This use of the judgment is explained clearly (and in relation to reflective judgment) in the First Introduction to the Critique of Judgment. (FI, C of J, 408-409)

which contain the condition for a priori rules. For this reason, while adopting as my theme the principles of the understanding, strictly so called, I shall employ the title doctrine of judgment, as more accurately indicating the nature of our task. (A 132; B 171)

Here judgment, while absolutely necessary, is in an ancillary role to the understanding. Kant does not discuss the question of its having principles essential to itself as a faculty. It is defined simply as "the faculty of subsuming under rules; that is, of distinguishing whether something does or does not stand under a given rule." (A 132; B 171) However, by the First Introduction to the Critique of Judgment, Kant takes the role of judgment far beyond mere subsumption:

For judgment is not merely an ability to subsume the particular under the universal (whose concept is given), but also, the other way round, an ability to find the universal for the particular. (FI, C of J 398)

It is this latter ability that will absorb Kant in the 3rd. Critique, and it is this that he calls reflective judgment. The capacity for subsuming is now termed determinative, and its transcendental interest is in the Critique of Pure Reason, where the general reflection of judgment is supplied with its principles by the understanding:

With regard to the universal concepts of nature, which first make possible a concept of experience at all... judgment requires no special principle by which to reflect: the instruction for this reflection is already [contained] in the concept of a nature as such, i.e., in the understanding, and judgment schematizes a priori and applies these schemata to each empirical synthesis, [the synthesis] without which no empirical judgment whatever would be possible. Here judgment not only reflects but also determines, and its transcendental schematism also

provides it with a rule under which it subsumes given empirical intuitions. (FI, C of J, 401)

With reflective judgment there is no such pre-given rule or universal; this has to be sought for by judgment.¹⁸⁹

At this point one might enquire as to why judgment should seek universals for particulars. Kant's definition of determinative judgment seems common-sensical and familiar, but with reflective judgment one is compelled to ask, what universals are being sought for? and more importantly, for what particulars? Surely empirical particulars, say, specific events or objects, will receive their universals via established rules of categorization; or, if no such rules exist for a given empirical object, one will be constructed based on previous experience. In neither situation does one seem to need a general notion of searching for universals.

¹⁸⁹Frederick Van de Pitte argues that Kant's distinction between determinant and reflective judgment is not one that really holds up because, given the organic unity of the system of categories, their "end" is the transcendental unity of apperception, and no such organic unity can be perceived without the use of reflective judgement, making it an essential part of the work of determinant judgment. Presumably he means that the transcendental unity of apperception would be that universal or totality that reflective judgment would be seeking for the particular categories, a very interesting point, given that "seek" would be entirely appropriate considering the inaccessibility of this transcendental unity. However, given this empirical inaccessibility and the purely critical nature of such apperception, I fail to see how the functions of determinant and reflective judgments really change; what Van de Pitte accomplishes, provided the argument holds up, is that reflective judgment plays a more fundamental role in the structure of the Critique of Pure Reason, though even this is problematic. See Van De Pitte, "Is Kant's Distinction Between Reflective and Determinant Judgment Valid?" Akten des 4. Internationalen Kant-Kongresses, (Berlin, 1974), passim.

There are, however, three situations which do need something more. The first is the existence of natural objects which cannot be explained through the kind of mechanical causality that Kant transcendently justifies in the first Critique. This is organic life. The second is the systematic unity of natural laws, which is an empirical unity inexplicable by way of the general use of the categories. The third is the existence of the sundered realms of cognition and morality, whose mutual alienation penetrates into the very soul of each and every individual, since each person has one foot in both domains.

Reflective judgment contains a solution to each of these problems, though in each case the solution lacks the constitutive quality of the laws of understanding and pure practical reason.¹⁹⁰ Moreover, the difference between the three situations makes it problematic when the same principle is used for them. The problem of organic life is a problem of a class of natural objects which seems inadequately explained through the causality of possible experience. The problem of systematic empirical unity is a problem of the meta-theory of science or any other cognitive enterprise.¹⁹¹ Both of these

¹⁹⁰From now on I will use "judgment" to refer to reflective judgment, since this is the focus of the Critique of Judgment. Determinative or determinant judgment will be referred to as such.

¹⁹¹As pointed out in previous chapters, formal and informal systems of knowledge will be considered as both requiring the same basic systematic grounding.

are problems immanent to possible experience, although only systematic unity seems to be a truly transcendental problem, i.e., a problem of the possibility of our knowledge. The problem of the gulf between cognition and freedom, on the other hand, is an inter-faculty problem and transcends possible experience. As will be shown, claims that attempt to combine solutions to both the immanent and transcendent problems will diverge from solutions that are more suitable to the nature of one set of problems; in this case, it is the immanent problems whose solutions are bent to the resolution of the transcendent problem.

On the other hand, there is no point denying that the three are linked in some sense, though the linkage is, epistemically, better construed through function than through unification of disparate areas. Reflective judgment has affinities with both the understanding and pure reason. Like pure reason, and unlike the understanding, reflective judgment has nothing to do with the constituting of the object; it is solely concerned with the subject. Thus reflective judgment, like the ideas of pure reason, is purely regulative and heuristic. It is not, in that sense, a part of the framework of possible experience; it concerns the unity of our knowledge. This unifying function, the seeking of a totality never graspable in experience, links reflective judgment with reason's desire for the unconditioned.

However, whereas pure reason is concerned with this unity in a wholly non-empirical sense, regulative judgment, while not referring to this or that empirical object or observation, is saying something about the totality of empirical objects and observations, i.e., it makes judgments about nature as a whole. And no judgments about nature that specifically refer to its totality can be wholly non-empirical. The function of the reflective judgment is only meaningful in the context of having nature before us, though not necessarily this or that object of nature. In that sense it is similar to the schemata of the Analytic, which are only meaningful in the presence of the intuitions of time and space, and its greatest resemblance is to its cousin principle, the principle of causality.

This gives a fresh turn to the sense of needing nature before us for reflective judgment to be meaningful. It must be a certain kind of nature, one which shows sufficient variation to make the principle of induction of any use whatsoever, though of course, assuming the presence of human beings, one would have sufficient diversity therein though external nature be invariant. In fact, the presence of even one observer sufficiently evolved to begin speculating on the problem of knowledge would seem to guarantee the presence of a variable nature, though not necessarily an externally variable one (which might produce certain peculiarities). This is not, of course, to propose such a situation as even an

imaginary example, but simply to indicate the minimum needed to render necessary a principle of induction.

This again makes reflective judgment akin to the applied categories of the understanding, particularly to the Analogies of experience and the Postulates of empirical thought in general. The Analogies depend upon time and space, but unlike the Axioms of intuition and the Anticipations of perception the bare presence of either is not a sufficient condition for their meaningfulness. In addition, there must be variation in both time and space, a process admitted throughout the Critique as the manifold of sensibility, but which is absolutely necessary in the Analogies. Permanence depends upon the variations of sensibility being conceived as changes in space-time as the permanent substratum; causality depends upon any given variation being construed through pure succession in time; and coexistence depends upon the construal of variation through pure extension in space. The postulates of empirical thought, as rules for the admission of objects as existent, also depend upon the existence of variation in time, the manifold of sensibility, since otherwise there would be nothing for them to classify.

The difference again, however, is that the principles of the understanding require only bare sensibility to function, whereas reflective judgment requires an experiential world of

objects in order to systematize knowledge about them.¹⁹² Since, however, reflective judgment provides the unity of the empirical component of actual experience, any experiential world of objects at a level above bare sensibility,¹⁹³ involves the presence of a principle of systematic unity, no matter how obscure such a presence might be. Thus reflective judgment is tied to experience on the one hand for its realm of functioning, and to the unconditioned on the other as the principle behind its reference to the totality of nature. This coincides exactly with the in-between place in which Kant locates judgment in general, above the understanding but below reason.¹⁹⁴

Reflective judgment also contains the solution to the problem of aesthetic feeling. Therefore, one is justified in asking, how relevant is the Critique of Aesthetic Judgment to

¹⁹²This view requires that the Critique of Pure Reason be interpreted as an analysis of the constituting of experience, the latter being taken in as basic a sense as possible. Thus a person seeing a flying pink elephant would be having an experience, even though this experience would not be construed as cognitively significant.

¹⁹³What such a bare level might be is impossible to articulate, since articulation would raise it automatically to a systematized level. Following Kant, one might attempt to construe it as "less even than a dream." (A 112)

¹⁹⁴It is also perhaps the source for Kant's suggestion of the metaphysical role that judgment could play in his architectonic, a role that involves mediating between the conceptual and ethical realms. Such a cosmic role, however, will not be explored here since it is not, I believe, a necessary feature of the reflective judgment's specific epistemological role in the refutation of scepticism, and in any case would be too broad for this thesis since it extends far beyond Kant's epistemology.

scientific judgment, apart from the similarity as forms of judgment, and a sense, as will be seen later on, that nature as technic evokes the image of art? In order to see whether there are any really important connections, it will be necessary to examine the specifics of Kant's analysis of aesthetic judgment.¹⁹⁵

Aesthetic Judgment

Aesthetics and scientific systemacity share at least one thing for Kant; they are subdivisions of the faculty of judgment.¹⁹⁶ This makes them different from the faculty of rules, the understanding, and the faculty of desire, pure practical reason. However, despite Kant's faculty divisions,

¹⁹⁵It should be reiterated that this discussion of the Critique of Aesthetic Judgment is not concerned at all with the merits of Kant's comments on artistic sensibility, be they general or specific. It is solely concerned with the metaphysical and epistemological insights that Kant's aesthetics can provide, and particularly with the latter.

¹⁹⁶In the translation of the Critique of Judgment that I am using, that is, Werner S. Pluhar's, there are two important ways in which he diverges from typical translations of Kantian terms. The first is the rendering of Vermögen as "power" rather than "faculty." This, as he points out, is to avoid turning what is an ability in Kant into a compartment or agency in the mind. (C of J, 3, n.3) The second is the translation of vorstellen and Vorstellung as "to present" and "presentation." This translation avoids the implication of a representational theory of perception suggested by the traditional renderings of "to represent" and "representation." (C of J, 14, n.17) However, since the traditional renderings in both instances are more frequently found in Kantian scholarship, and have acquired a typical, though misleading, Kantian flavour, I have used "faculty" and "representation."

what strikes the reader of the 3rd. Critique is that aesthetic judgment stretches out a hand to morality, i.e., pure practical reason, and scientific judgment stretches out a hand to knowledge, i.e., the understanding. Thus, as Stuart Hampshire remarks,

[i]n the Critique of Judgment we learn that there is a bridge that conducts us from unreclaimed nature to rational freedom, a bridge prepared and ready for all mankind, even though earlier critical writings may suggest that there could be no such bridge.¹⁹⁷

The metaphysical connection between aesthetic teleology and scientific teleology thus seems to consist in the reaching of aesthetics towards pure practical reason, i.e., morality, and the reaching of scientific judgment toward the theoretical realm, i.e., pure reason and the understanding, providing a basis for Kant's suggestion that judgment fashions a connection between the realms of knowledge and freedom. Freedom manifests itself in the expression of morality through art; knowledge is manifested through the reflective judgment's assumption that nature is cognizably systematic, that it is purposive, i.e., marked by a unified harmony susceptible of being known. However, the unified purposive harmony of nature will also be used by Kant as a bridge to moral freedom, since the causality of moral action is itself purposive (though with purpose).

¹⁹⁷Stuart Hampshire, "The Social Spirit of Mankind." Kant's Transcendental Deductions. (Stanford Series in Philosophy) ed. Eckart Fo"rster. (Stanford, California: Stanford University Press, 1989), 145-146.

All this notwithstanding, does the large-scale metaphysical relationship of aesthetic and scientific judgment clarify in any way the small-scale epistemological refutation of scepticism, which takes place within the cognitive realm and not in the relations between the different realms? That is, is there anything in aesthetic judgment that is related to the teleological judgment's refutation of inductive scepticism? By Kant's own statement there is one, insofar as the principle of systematicity evokes pleasure in us, the same pleasure that is the basis for aesthetic appreciation, whereas anticipation of empirical disunity would cause us displeasure. (C of J, 26-28)

Perhaps another connection between the scientific imposition of order upon nature and aesthetic judgment lies in the aesthetic appreciation of nature, which is based on the perception of its orderliness (its conformity, in this sense, to a reasonable order). This would seem to be limited to the perception of the beauty of nature, since this is still immanent; the perception of the sublime, on the other hand, depends upon an imposition of transcendence upon nature i.e., an evoking in us, by natural objects, of thoughts of the supersensible basis of nature:

The sublime recalls in sensuous terms the divided self of moral aspiration and the conflict between the understanding and ideas of reason, which extend without limit beyond experience. The sublime presents nature in all its boundlessness, and with it nature sinking into insignificance before ideas of reason. So there is the Pascalian oscillation between fear in the face of the suggestions of infinity in the starry

heavens, and fear of the metaphysical abyss in which one can be lost, and then the answering assertion of pride in the understanding of nature.¹⁹⁸

However, in the sense that this is an imposition of morality upon nature and not an objective judgment about it, the perception of the sublime does resemble the work of the reflective teleological judgment. Nevertheless, the only resemblance is in form not content, whereas perception of natural beauty involves both a form and content similar to that of the reflective teleological judgment; the only distinction is that the two are used for different purposes, the aesthetic judgment of beauty relating to our feelings of pleasure and pain, whereas the teleological judgment relates to our knowledge. Hence the one relates completely to the subject, while the other has objective relevance (though not being an objective principle).

The two sorts of judgment, aesthetic and teleological, are rightly discussed in the 3rd. Critique because they both involve the ordering of nature in a fashion that exceeds the basic ordering of experience (the theoretical realm) and morality (the practical realm). The difference between them, however, might be that aesthetic experience is less necessary than some basic cognitive ordering of experience, since the latter plays a vital role in the construction of actual experience.¹⁹⁹

¹⁹⁸Hampshire, 153.

¹⁹⁹See Chapter Three where I argue this.

Beauty

Kant begins his discussion of judgments of taste, under which beauty falls, by clearly separating them from the sorts of judgments we engage in when cognizing:

If we wish to decide whether something is beautiful or not, we do not use understanding to refer the presentation to the object so as to give rise to cognition; rather, we use imagination (perhaps in connection with understanding) to refer the presentation to the subject and his feeling of pleasure or displeasure. Hence a judgment of taste is not a cognitive judgment and so is not a logical judgment but an aesthetic one, by which we mean a judgment whose determining basis cannot be other than subjective. (C of J, 44)

Therefore, judgments of taste are subjective, in contrast to, say, judgments of knowledge.²⁰⁰

They are also characterized by a lack of interest. For Kant, interest, i.e., a desire for the existence of an object, is present intrinsically only when we perceive objects as either agreeable or good:

But if the question is whether something is beautiful, what we want to know is not whether we or anyone cares, or so much as might care, in any way, about the thing's existence, but rather how we judge it in our mere contemplation of it... . (C of J, 45)

²⁰⁰It should be repeated again that "subjective" and "objective" do not, in this context, connote, say, "phenomenal" and "noumenal." They do not even hint at the common-place superiority of objectivity over subjectivity. As was pointed out previously, subjectivity, in the realm of possible experience, means only the movement of our thoughts or faculties, while objectivity is only that which can be known of the world, such as the laws of physics. Naturally, this is also solely within the context of possible experience.

In virtually the same breath Kant goes on to say that the least interest corrupts the purity of judgments of taste (C of J 46), which means that interest can be involved in such judgments, but will then render them mixed. In fact, judgments of taste are either empirical, pure, or applied: the first are judgments in which agreeableness, charm or emotion are mingled, and are called material aesthetic judgments or judgments of sense (C of J, 68-69); the second are judgments solely about the form of an object and are called formal aesthetic judgments; the third kind are judgments wherein the object's beauty is at least partially conditioned by "the concept of the purpose that determines what the thing is [meant] to be, and hence a concept of its perfection, and so it is merely adherent beauty." (C of J, 77)

The third type of aesthetic judgment is particularly mixed for Kant, because one of the chief characteristics of aesthetic appreciation is that it is, at least in its pure form, not based on concepts. If it were, then it would be determinate and therefore objective, and Kant does not want to make the mistake of saying this, since determinacy and objectivity have a cognizable universality that would bind human subjectivity (in the manner of the categories).

We like, for Kant, three types of things: those which gratify us (the agreeable); those which we esteem (the good); and those which we simply like (the beautiful). Agreeableness, says Kant, applies to all animals, rational and

otherwise, i.e., human beings as well as other animals. The good, on the other hand, as defined through the categorical imperative, applies to all rational beings, human or otherwise. Beauty, however, holds for human beings alone, that is, "beings who are animal and yet rational, though it is not enough that they be rational (e.g., spirits) but they must be animal as well". (C of J, 52) Also, of the three types of liking,

... only the liking involved in taste for the beautiful is disinterested and free, since we are not compelled to give our approval by any interest, whether of sense or of reason.... All interest either presupposes a need or gives rise to one; and, because interest is the basis that determines approval, it makes the judgment about the object unfree. (C of J, 52)

Therefore, one could say of judgments about beauty that they are essentially without practical value, since interest is the basis of such value.

It is just this lack of interest that lends universality to judgments of taste. The person making a judgment about beauty must believe that

... he is justified in requiring a similar liking from everyone because he cannot discover, underlying this liking, any private conditions, on which only he might be dependent, so that he must regard it as based on what he can presuppose in everyone else as well. He cannot discover such private conditions because his liking is not based on any inclination he has (nor on any other considered interest whatever): rather, the judging person feels completely free as regards the liking he accords the object. (C of J, 54)

Thus, concludes Kant, in this respect an aesthetic judgment resembles a logical judgment because we presuppose its

validity for everyone; however, since this validity is not based on concepts, it is solely a subjective universality, which does not extend over the object, but over "the entire sphere of judging persons." (C of J, 59) It is odd to say, for example, that an object is beautiful for me, though it is not odd to say that it is charming or agreeable to me. The peculiarity of this subjective universality is that when beauty is spoken of, it is spoken of as if it were a property of the object, though in fact it is referred only to the subject. (C of J, 55-56) This is, presumably, because the reference to the subject is to all subjects, not the given empirical subject.

Kant adds, nevertheless, the caveat that universal agreement on beauty is not postulated but required. This is because he is quite aware that actual empirical agreement about beautiful objects is far from universal; this, however, he attributes to a failure in application. (C of J, 58) He is actually not that concerned as to whether any given aesthetic judgment is acclaimed as universal or not; he is concerned more with giving an account of what it is we do in making such judgments, and whether what we do has a necessary component to it.

It is subjective universality that provides the initial transition from aesthetics to the general conditions of cognition. Kant states that the universal communicability of the mental state that occurs when an object is presented to us

(without interest and not cognitively), is what underlies taste as its subjective condition, i.e., the condition that permits the activity that is aesthetic judging. (C of J, 61)

However,

Nothing... can be communicated universally except cognition, as well as presentation insofar as it pertains to cognition; for presentation is objective only insofar as it pertains to cognition, and only through this does it have a universal reference point with which everyone's presentational power is compelled to harmonize. (C of J, 61)

Cognition is essentially conceptual, whereas aesthetic appreciation is not. Therefore, the determining basis of taste must only be "the mental state that we find in the relation between the presentational powers [imagination and understanding] insofar as they refer a given presentation to cognition in general." (C of J, 61-62) Since this reference is to be without restriction by determinate concepts i.e., what is being referred to cognition is not being so referred for the purpose of objective corroboration (in pursuit of knowledge), the cognitive powers brought into play are in free play, tied down to no theoretical purpose.

First of all, this would seem to be an obvious instance of purposiveness without purpose, though Kant has not yet introduced this idea. Secondly, it would also seem that the type of aesthetic appreciation Kant is concerned with most in connection with beauty is that which focuses on form exclusively, wherein appreciation of beauty is, as we shall see, the appreciation of the form of an object, and the

structure of the feeling of appreciation is the form of cognition alone. Thirdly, this is the first instance of the tie between aesthetics and cognition, although it is so far only a tie between aesthetics and the framework of cognition, i.e., possible experience. And fourthly, the free play of the cognitive powers is a definition of purposiveness without purpose that is both located in judgment as a faculty (FI, C of J, 411), and immanent to possible experience. It is not based on design.

The universality of aesthetic judgment is purely subjective, though it is connected to the form of objective cognition. Thus the necessity that is implicit in assuming an aesthetic judgment to be universally valid, must also be subjective. Kant contrasts this subjective necessity with the predictive necessity of cognition, which allows us to say that everyone will cognize the world in such and such a way, namely, through the schematized categories. It also contrasts with "practical objective necessity," which gives us what we absolutely ought to do, i.e., follow the moral law. Subjective aesthetic necessity is exemplary in nature; it is "a necessity of the assent of everyone to a judgment that is regarded as an example of a universal rule that we are unable to state." (C of J, 85)

It is not particularly clear at the outset why this notion of being exemplary differs so much from the exhortative necessity of the categorical imperative, and the "ought" used

by Kant to describe aesthetic necessity seems to be very close to the moral "ought":

A judgment of taste requires everyone to assent; and whoever declares something to be beautiful holds that everyone ought to give his approval to the object at hand and that he too should declare it beautiful. hence the ought in an aesthetic judgment, even once we have [nach] all the data needed for judging, is still uttered only conditionally. We solicit everyone else's assent because we have a basis for it that is common to all. Indeed, we could count on that assent, if only we could always be sure that the instance had been subsumed correctly under that basis, which is the rule for the approval. (C of J, 86)

It is the last sentence that gives the clue to the difference. We can never be completely sure of correctly subsuming a given object as beautiful under the common basis of our cognitive apparatus because the perception of beauty is not based on a determinate concept, and therefore cannot be held up to such a concept to be judged as correct or incorrect. If it could be held up in such a way, then it would no longer be beauty but knowledge.

Kant goes on to say that judgments of taste presuppose a common sense, which is neither ordinary "common sense," which, Kant says, still judges by concepts even if these are obscurely conceived, nor some kind of outer sense that perceives objects. This common sense is a commonality of the inner feeling arising from the free play of the cognitive powers. (C of J, 238) Why should we assume such an entity? We assume it because it is "the necessary condition of the universal communicability of our cognition, which must be

presupposed in any logic and any principle of cognition that is not skeptical." (C of J, 88)

This is really a transcendental principle of the understanding, which should have, as such, been developed in the Critique of Pure Reason, but is not, presumably because Kant is not particularly concerned there with, say, the problem of solipsism. It is also another instance of the tie between aesthetics and cognition.²⁰¹

Purposiveness without purpose

Purposiveness without purpose is the defining concept of the Critique of Judgment. Kant uses at least three different types of purposiveness without purpose (henceforth abbreviated to pwp).²⁰² These are:

1. Aesthetic

²⁰¹In fact, one is tempted to call such "common sense" the subjective analog of systematic scientific judgment, since the one presumes subjective unity between cognizing subjects, while the other presumes "objective" empirical unity (though for subjective purposes). However, it may be more plausible to see common sense as the subjective analog of the schematized categories, since there seems to be no suggestion that this is even an assumed empirical unity of subjects, but is presented as communicability as such, just as the categories make possible experience as such.

²⁰²Purposiveness covers many shades of meaning, depending on which section of the third Critique one is reading, including its first introduction. On these varied and shifting uses see G. Tonelli, "Von den verschiedenen Bedeutungen des Wortes 'Zweckmässigkeit' in der Kritik der Urteilskraft," Kant-Studien, vol.49, (1957).

2. Systematic

3. Metaphysical (Theological)

As will be shown, systematic pwp is also subdivided into systematic pwp proper and a version of sytematic pwp that is proto-metaphysical. These two definitions are mixed together in the Critique of Judgment to the considerable detriment of his critical project of epistemology; however, the proto-metaphysical definition is vital to Kant's metaphysical project.

Organic purposiveness is not included in this list since it does include the the notion of a purpose i.e., an organism as both cause and effect of itself, which Kant calls a natural purpose. Nevertheless, it will be discussed, since it provides a contrast to the formal side of purposiveness, and because it furnishes a good example of Kant's subordination of this concept to the larger metaphysical task of the third Critique.

Aesthetic Purposiveness

Kant begins by defining a purpose as the object of a concept insofar as the concept is seen as causing the object, and the causality that such a concept has with regard to its object is called purposiveness. He then goes on to define pwp by way of contrast with moral purposiveness:

The power of desire, insofar as it can be determined to act only by concepts, i.e., in conformity with the presentation of a purpose, would be the will. On the other hand, we do call objects, states of mind, or acts purposive even if their possibility does not necessarily presuppose the presentation of a purpose; we do this merely because we can explain and grasp them only if we assume that they are based on a causality [that operates] according to purposes, i.e., on a will that would have so arranged them in accordance with the presentation of a certain rule. Hence there can be purposiveness without a purpose, insofar as we do not posit the causes of this form in a will, and yet can grasp the explanation of its possibility only by deriving it from a will. (C of J, 65)

This definition of pwp has a strong metaphysical flavour to it, though its use is critical, non-metaphysical, and regulative. Kant goes on to say that judgments of taste can be based on neither subjective nor objective purposes, because the former always contain interest, which contaminates the purity of such judgments, while the latter, essentially the purposes of the moral law, are based on concepts, which again spoil the purity of aesthetic judgments.

Kant says this here, but later on he somewhat inconsistently ties aesthetics to morality, first by saying that the beauty symbolizes morality, secondly, by making morality one of the bases for the universality of aesthetic judgment in the case of our appreciation of the sublime, and thirdly, by making the free appreciation of beauty a

propaedeutic to the free subordination of our wills to the moral law. (C of J, 158 & 228-230)²⁰³

Judgments of taste are therefore based on a subjective purposiveness that lacks purpose, i.e., that lacks an object, while accompanying the presentation of one; it is the mere form of purposiveness. Aesthetic pleasure, therefore, is the "very consciousness of a merely formal purposiveness in the play of the subject's cognitive powers, accompanying a presentation by which an object is given...." (C of J, 68)

In his general comment on the Analytic of the Beautiful, Kant gives us a definition of purposiveness that depends more on a transcendental link between faculties than on an "as if" projection of design upon objects:

It seems, therefore, that only a lawfulness without a law, and a subjective harmony of the imagination with the understanding without an objective harmony - where the presentation is referred to a determinate concept of an object - is compatible with the free lawfulness of the understanding (which has also been called purposiveness without a purpose) and with the peculiarity of a judgment of taste. (C of J, 92)
[emphasis added]

Kant is designating the free lawfulness of the understanding as at least a form of pwp, which, though it follows from the general sense of pwp by simply taking the activity of the

²⁰³Although the discussion of Kant's aesthetics per se is not the purpose of this thesis, one could observe that here we have another instance of the way in which Kant's metaphysical project muddies the waters of a lesser critical task. This is not to disparage the metaphysical task as such, but only to ask whether it might not be better accomplished independently of Kant's aesthetic and epistemological projects.

understanding and removing its object (leaving behind the form of theoretical cognition), is important in that it makes no reference to positing an arrangement of objects according to an assumed will, i.e., regulative design. The free lawfulness of the understanding, like the free play of the cognitive powers that is aesthetic feeling, is a notion without design, though it is not clear what transcendental purpose it serves (unlike the free play of the cognitive powers, which has the transcendental function of making aesthetic judgments a priori possible).

Organic Purposiveness

Kant opens the Analytic of Teleological Judgment with two important distinctions. The first is between formal objective purposiveness and material objective purposiveness. These are objective, unlike aesthetic pwp, because they serve as principles for the possibility of objects, whether formal, such as geometrical figures, or material, such as organic life. Kant does not seem particularly interested in formal objective purposiveness, since it requires no empirical component outside of ourselves. (C of J, 241-242) It is material objective purposiveness that occupies most of the discussion, since, as Kant contends, we need this notion to judge a certain kind of relation of cause and effect; this relation "is such that we can see it as law-governed only if

we regard the cause's action as based on the idea of the effect, with this idea as the underlying condition under which the cause itself can produce that effect." (C of J, 244)

There are two types of this purposiveness. They involve the second distinction, which is between relative and intrinsic purposiveness. In relative, or extrinsic, purposiveness, objects are designated as means towards ends external to them e.g. such and such a natural object being considered as a means for the survival of the human race. Kant is at some pains to avoid the crude version of this (C of J, 244-247), but will later on develop a critical conception of extrinsic purposiveness which leads directly into physico-theology and metaphysical pwp. Intrinsic purposiveness, on the other hand, exists when the object is both cause and effect of itself. In a subtler fashion than relative purposiveness, this notion also leads into metaphysical pwp.

Intrinsic purposiveness is necessary in order to explain the causality of organic life, a causality that does not fall under mechanical efficient causality, such as was proven in the Critique of Pure Reason. The latter, says Kant, is not capable of constructing the notion of reciprocity of cause and effect that the explanation of organic life requires:

A causal connection, as our mere understanding thinks it, is one that always constitutes a descending series (of causes and effects): the things that are the effects, and that hence presuppose others as their causes, cannot themselves in turn be causes of these others. This kind of causal connection is called that of efficient causes.... But we can also conceive of a causal connection [Verbindung] in terms of a concept

of reason (the concept of purposes). Such a connection, considered as a series, would carry with it dependence both as it ascends and as it descends: here we could call a thing the effect of something and still be entitled to call it, as the series ascends, the cause of something as well. (C of J, 251)

Kant gives us an example from the "practical sphere," where a house can be considered the cause of the rent one gets from it, but, conversely, the representation one had of this possible rent caused the house to be built.

The analogous natural form would have to meet two conditions in order to be considered a natural purpose: 1) that its whole determines the possibility and nature of its parts; and 2) that these parts are reciprocally cause and effect of their respective form i.e., the whole. The natural form would then be both organized and self-organizing and would therefore be a natural purpose. (C of J, 252-253)

Nevertheless, the notion of a natural purpose is not constitutive of the world in any way, neither of the natural world, though its objects exist there, nor of the moral realm, though their explanation comes from there. Thus organic purposiveness belongs to neither understanding nor reason, but functions regulatively for judgment, where (and only where) mechanical causality falls short:

It can still be a regulative concept for reflective judgment, allowing us to use a remote analogy with our own causality in terms of purposes generally, to guide our investigation of organized objects and to meditate regarding their supreme basis - a meditation not for the sake of gaining knowledge either of nature or of that original basis of nature, but rather for the sake of [assisting] that same practical power in us [viz., our reason] by analogy with which we were considering

the cause of purposiveness in organized objects. (C of J, 255) [emphasis added]

Once more Kant has linked the small-scale use of purposiveness with the metaphysical task of the 3rd. Critique; the use of a principle borrowed from the moral sphere (acting according to purposes) allows organic purposiveness to partake of the realm of freedom sufficiently so that it can, in return, be a propaedeutic of sorts to moral existence, in much the same manner as the free aesthetic appreciation of beauty was said to smooth the transition from appreciation of freedom in nature and art to valuing the freedom of the will in moral action.

Having linked organic purposiveness to freedom conceptually and then using this to foster the subject's appreciation of such freedom, Kant takes the metaphysical project one step further by asking, in the Dialectic of Teleological Judgment, how such a teleological principle of explanation can be reconciled with the mechanical principle of explanation especially if they can both be brought to bear at the same time on a given natural form. The initial answer is the same one given in the Critique of Pure Reason concerning the Antinomies; namely, that as long as we see these two opposed principles as constitutive of nature then we are going to fall into antinomy, but that this problem vanishes once we see that the teleological principle is purely heuristic. (C of J, 295-296)

However, Kant then raises the question of whether these two principles can be reconciled in a common basis of sorts.²⁰⁴ His answer is:

If we are to have a principle that makes it possible to reconcile the mechanical and the teleological principles by which we judge nature, then we must posit this further principle in something that lies beyond both (and hence also beyond any possible empirical presentation of nature), but that nonetheless contains the basis of nature, namely, we must posit it in the supersensible, to which we must refer both kinds of explanation. (C of J, 297)

This positing is completely indeterminate because we have no concept of such a supersensible i.e., a noumenal basis. Kant thus concludes:

We cannot reconcile the two principles on a basis that would allow explanation (explication), on the part of determinative judgment, of how a product is possible in terms of given laws, but only on a basis that allows examination [Eroeterung] (exposition) of this possibility, on the part of reflective judgment. For to explain [something] means to derive [it] from a principle, and hence we must be able to cognize and state this principle distinctly.... But if this principle is of such a kind that we can only point to it, but can never cognize it determinately and state it distinctly so as to apply it to the cases that occur, then we cannot use it to explain... how there can be a natural product in terms of both of those heterogeneous [sic] principles. (C of J, 297)

This indeterminability notwithstanding, we can still use mechanism and teleology together because "we are assured that it is at least possible that objectively, too, both these

²⁰⁴Although he does not go into it, the reason that Kant cannot stick with the regulative/constitutive reconciliation of teleology and mechanism, is obviously because mechanical causality is actually constitutive of the realm of possible experience and brooks no rivals therein, although outside of this realm, in moral action, it gives way to the causality of freedom.

principles might be reconcilable in one principle (since they concern appearances, which presuppose a supersensible basis)."

(C of J, 298)

The purpose of this discussion is not to evaluate Kant's contribution to biology (or lack thereof). However, his use of organic purposiveness illustrates what will become evident in his treatment of systematic pwp; namely, his choice of a metaphysically oriented solution to a problem, where a more restricted critical or transcendental solution already exists or is at least possible. The definition of organization that he gives, that the parts and whole are reciprocally cause and effect, or, alternatively, where everything is both purpose and means (C of J, 255), is not in itself particularly metaphysical. Where it gets metaphysical is in the claim that the causality of possible experience cannot handle reciprocal causation and that we must bring in the purposive causality of the moral realm i.e., the causality of freedom.

It is not clear that one must go beyond possible experience to obtain a principle adequate to reciprocal causation. True, the principle of causality enunciated in the Critique of Pure Reason is one based on succession in time, which excludes reciprocity; however, there is a principle of possible experience that not only includes reciprocity but is the embodiment of it. This is the principle of co-existence expounded in the Third Analogy:

All appearances, since they are contained in a possible experience, must stand in community... of

apperception, and in so far as the objects are to be represented as coexisting in connection with each other, they must mutually determine their position in one time, and thereby constitute a whole. If this subjective community is to rest on an objective ground, or is to hold of appearances as substances, the perception of the one must as ground make possible the perception of the other, and reversewise - in order that the succession which is always found in the perceptions, as apprehensions, may not be ascribed to the objects, and in order that, on the contrary, these objects may be represented as coexisting. (A 214; B 261)

Now it is true that the principle of coexistence is discussed in terms that suggest spatial reciprocity, such as the parts of a house have, not explanatory or causal reciprocity. It is also a very general principle. But there seems no intrinsic reason to preclude some modification of this principle that would apply to organic life, especially since the kind of causality called for there is not exactly a causality of events but one of explanation. What would preclude such a modification would be that it would provide no basis for a transition from possible experience to the supersensible.²⁰⁵

Kant also develops, alongside organic purposiveness, a notion of nature as a system of purposes. He decries the crude variants of such theories e.g. that rivers further communication among people living inland or provide irrigation to land that lacks rain. Nevertheless, once we have the notion of things that are explicable non-mechanically, what is

²⁰⁵I am not saying that Kant thought things through in this fashion, just that his pre-occupation with the metaphysical task of the Critique of Judgment might have caused him to overlook a solution closer to possible experience.

to prevent us from viewing nature as a whole as a system of purposes?

Once we have discovered that nature is able to make products that can be thought of only in terms of the concept of final causes, we are then entitled to go further; we may thereupon judge products as belonging to a system of purposes even if they... do not require us... to look for a different principle beyond the mechanism of blind efficient causes. For the idea of nature as a system of nature already leads us, as concerns its basis, beyond the world of sense, so that the unity of the supersensible principle must be considered valid not merely for certain species of natural beings, but just as much for the whole of nature as a system. (C of J, 260-261) [emphasis added]

This sort of purposiveness, however, will not be reciprocal. as relative or extrinsic purposiveness, it requires an object outside of itself as its final cause, which object is easily supplied in the moral subject of Kant's ethics.

From the previous quotation it can be seen what mischief has been done by going outside possible experience for principles of explanation; having used such a principle for one set of objects, it is then expanded to cover all of nature. But in this latter project it is not organic purposiveness alone that is the culprit. Kant mentions the "idea of nature as a system of nature," and how this leads us beyond sense; this is none other than systematic pwp.

Systematic Purposiveness

Kant introduces the problem of systematic unity via the problem of heterogeneity he had already perceived in the Critique of Pure Reason. (A 653-654; B 681-682) The problems with his solution there have already been discussed. Here its resolution lies in the very workings of judgment:

Since the laws that pure understanding gives a priori concern only the possibility of a nature as such (as object of sense), there are such diverse forms of nature, so many modifications as it were of the universal transcendental concepts of nature, which are left undetermined by these laws, that surely there must be laws for these forms too. Since these laws are empirical, they may indeed be contingent as far as our understanding can see; still, if they are to be called laws (as the concept of a nature does require), then they must be regarded as necessary by virtue of some principle of the unity of what is diverse, even though we do not know this principle. (C of J, 19)²⁰⁶

Kant goes on to say that judgment thus requires a non-empirical principle by which empirical principles can be systematically organized and subordinated to one another. Moreover,

...this transcendental principle must be one that reflective judgment gives as a law, but only to itself: it cannot take it from somewhere else (since judgment would then be determinative); nor can it

²⁰⁶When Kant says, we do not know this principle, he must mean that it, like the transcendental unity of apperception that is the "I think", is not itself an object of cognition, in the way the objects of experience are. It should also be noted here that "nature as such" is equated with "object of sense" not "object of cognition", which lends credence to the view that the Critique of Pure Reason constructs the realm of possible experience but does not really deal with knowledge. It is still ambiguous, nevertheless, as to whether this is an actual nature as actual object of sense, or a possible nature, a possible object of sense. As actual object of sense, nature should then come under the jurisdiction of reflective judgment.

prescribe it to nature, because our reflection on the laws of nature is governed by nature, not nature by the conditions under which we try to obtain a concept of it that in view of these conditions is quite contingent. (C of J, 19) (emphasis added)

Thus judgment is constrained to find a principle which is not only intrinsic to itself, but which does not impose an artificial unity on the matters of fact that nature displays to us.²⁰⁷

Kant gives us two versions of such a principle of unity, which, though very similar, differ insofar as one suggests a proto-theological view of unity, while the other remains strictly within the bounds of epistemic unity. Normally these two versions, even when distinguished, are taken as mutually compatible in some sense; thus Buchdahl, actually distinguishing four moments in Kant's justification of science, states:

Methodologically, we have the regulative procedure; teleologically, the notion of the 'ground' (qua 'final cause')... theologically, such a ground regarded as 'supreme wisdom', a 'being of reason', a 'substratum',.... Finally, the empirical analogue is to be traced in those technical paradigms of theoretical reasoning which yield unitary principles or sets of explanatory axioms or taxonomical systems, as displayed in the achievements of Maupertuis, Newton and Linnaeus.²⁰⁸

²⁰⁷As it turns out, unity is imposed, but not on matters of fact as such, nor on the empirical laws governing them. The unity imposed by judgment will weigh solely upon the enterprise of knowing as a whole and as such, and will constitute a goal for this enterprise, rather than a mere imposition.

²⁰⁸Buchdahl, Metaphysics and the Philosophy of Science, 524.

He goes on to point out the parallelism between at least the first three "analogues," but admits that what is "not so clear is the degree of strength of the arguments in favour of the putative need for the movement from the methodological analogue to its teleological, let alone from the latter to its theological form."²⁰⁹ Earlier on Buchdahl shows that the relationship of reason to the empirical laws it systematizes is analogical to the relationship between the categories and the appearances it systematizes, and being analogical, there is less of a logical relationship between the two sorts of activity but a similarity of form that he calls a "looseness of fit" between understanding and reason.²¹⁰ There is this same looseness of fit between the four analogues, and Buchdahl finally seeks the justification for the transition to the theological analogue outside the epistemic framework, in Kant's ethical interests.²¹¹

The difference in emphasis of the two definitions may not be merely a question of the "fit" between Kant's metaphysical and epistemological tasks. As was pointed out previously, much of reflective judgment is anticipated in the regulative ideas of pure theoretical reason in the Critique of Pure Reason. Generally speaking, systematic pwp is given as an original principle of the faculty of judgment; however, in

²⁰⁹Ibid., 527.

²¹⁰Ibid., 500-503.

²¹¹Ibid., 528-529.

at least two places Kant speaks of it as a principle given to judgment by reason. (C of J, 288 & 325) The argument for this is as follows: reason inevitably goes beyond the understanding i.e., beyond the realm of possible experience, because it seeks the unconditioned condition for the conditioned. When this happens, reason becomes transcendent and its ideas are no longer objectively valid concepts. However, the understanding can still make use of these ideas by making them regulative principles restricted to the subject as conditions of the latter's thinking. (C of J, 284-286)

With regard to the empirical unity of nature, Kant then says that reason demands the unconditioned even for nature's particular laws; it demands their unity. The concept of purposiveness, in this context, is "a subjective principle that reason has for our judgment, since this principle is necessary for human judgment in dealing with nature." (C of J, 288) Kant has earlier explicitly denied that pwp belongs to reason: "This concept belongs to reflective judgment, not to reason, because the purpose is not posited in the object at all, but is posited solely in the subject". (FI, C of J, 404) He also generally ascribes pwp to reflective judgment as an original principle throughout the Critique of Judgment. Why has he not done so above and is this important re the two definitions of systematic pwp?

The ascription of pwp to the faculty of reason is important because it is a reversion to the use of the

regulative ideas of reason in the Dialectic of the Critique of Pure Reason. This use, while epistemically important, is essentially an immanent use of transcendent ideas, a use that threatens to blossom into a full-scale metaphysic if not carefully pruned by the critical philosophy. The great advantage of shifting this epistemic use into the faculty of judgment and deriving it from the same, is that we now have an immanent use of an idea that, if not quite immanent, is not as alarmingly transcendent as the design-oriented systematicity that reason uses to unify nature. And, as will be seen, the definition of systematic pwp that reflects the latter paves the way for Kant's metaphysical task, by virtue of its incipient transcendence. This definition is as follows:

Since universal natural laws have their basis in our understanding, which prescribes them to nature (though only according to the universal concept of it as a nature), the particular empirical laws must, as regards what the universal laws have left undetermined in them, be viewed in terms of such a unity as [they would have] if they too had been given by an understanding (even though not ours) so as to assist our cognitive powers by making possible a system of experience in terms of particular natural laws. That does not mean that we must actually assume such an understanding... rather, in using this principle judgment gives a law only to itself, not to nature. (C of J, 19-20)

This sets the stage for Kant's development of our "as if" perception of purposiveness without purpose, where nature is judged as if it were designed by an intelligence, though we are constantly warned by Kant not to hypostasize this purely regulative notion into a real Being giving real design to the world. This regulative conception of design, though

originally designated for epistemic purposes, becomes Kant's means of uniting cognition and morality. The purposiveness of nature is perceived, both aesthetically and epistemologically, as being rooted in a regulative concept of the supersensible, which, hitherto banished from the empirical realm, now becomes the basis that we suppose underlies empirical reality and injects it with purposiveness. Nature is the theoretical concept and purpose is the practical one; they blend into purposiveness without purpose, and join cognition to morality.

Kant's second definition has quite a different flavour. It eschews the theological overtones of design and "understandings other than ours", and confines itself to epistemological demands and solutions:

If there is to be a concept or rule that arises originally from the power of judgment, it would have to be a concept of things of nature insofar as nature conforms to our power of judgment, and hence a concept of a [special] character of nature: the only concept we could form of this character is that [nature's] arrangement conforms to the ability we have to subsume the particular laws, which are given, under more universal laws, even though [doch] these are not given. (FI, C of J, 392)

That is, just as the schematized categories were transcendently necessary to provide a domain for the understanding, and just as the categorical imperative and the concept of noumenal causality were also transcendently necessary to create a sphere of morality for pure practical reason, so is it transcendently necessary that judgment have a principle or concept that would allow nature to become an object for it and its special activity. The concept of

nature's special character that Kant sees as necessary for judgment is "that of a purposiveness of nature for the sake of our ability to cognize nature, insofar as this ability requires that we be able to judge the particular as contained under the universal and to subsume it under the concept of a nature." (FI, C of J, 392)

What is the purposiveness of nature? According to Kant, it is "the concept of experience as a system in terms of empirical laws." (FI, C of J, 392) He goes on to state once more the problem of the possible heterogeneity of empirical laws, that would confound our cognition despite the security of the transcendental unity of experience. Empirical laws, no less than the pure laws of experience, must be susceptible of subsumption under a system of empirical unity, else judgment cannot have a notion of experience as a whole. This would undermine the scientific project (and indeed, any cognitive project whatsoever), since, as Hume pointed out, we rely, in such projects, on a principle of the resemblance of the future to the past, which is simply another way of referring to empirical unity.

Kant makes this clear by making the purposiveness of nature a lawfulness that is heuristic rather than substantive:

This lawfulness is a formal purposiveness of nature that we simply assume in it; it provides no basis for a theoretical cognition of nature, nor for a practical principle of freedom, but it does give us a principle for judging and investigating nature: a principle by which to seek, for particular experiences, the universal [empirical] laws we must follow in engaging in such experiences in order to bring out that

systematic connection [of them] which [we] need for coherent experience and which we have grounds to assume a priori. (FI, C of J, 393)

Kant's statement that purposiveness "provides no basis for a theoretical cognition of nature" might seem confused, since, in providing science with a concept of empirical unity, it does just that. It must be remembered that for Kant "theoretical cognition" is a fairly specific term, denoting the concrete activity of science which then allows us to characterize nature objectively. If purposiveness was to specifically provide a basis for such an objective description of nature, then this would mean saying that nature is actually teleological in character, we can observe purposes in it, and that this should be the cornerstone of, say, physics. This is far from Kant's intent; indeed, he is at pains to make the concept of the purposiveness of nature an entirely regulative one for science:²¹²

This concept provides no basis for any theory, and it does not contain cognition of objects and their character any more than logic does: it gives us only a principle by which we [can] proceed in terms of empirical laws, which makes it possible for us to investigate nature. But this... does not enrich our knowledge of nature with a special [besonder] objective law, but only serves judgment as the basis for a maxim by which we [can] observe nature and to which we [can] hold up [and compare] nature's forms. (FI, C of J, 393-394)

²¹²One might say that it conducts the orchestra but does not play the instruments.

This concept is "the concept of nature as art; in other words, it is the concept of the technic of nature regarding its particular [besonder] laws." (FI, C of J, 393)²¹³

The key point is that judgment deals with appearance artistically (as a technic) and not schematically; it does not subsume nature under laws objectively but assumes empirical unity as a starting-point, one might almost say, an inspiration, for the process of scientific investigation. As a principle, this technic of nature is universal but indeterminate: it is not explicable, closely determinable, or objectively based. (FI, C of J, 402) These are the exact characteristics of the "common sense" of aesthetic feeling described earlier.

What the technic of nature, as presented in systematic pr, cannot do is actually determine appearances and it cannot therefore belong to empirical concepts of objects. (FI, C of J, 408) Presumably then it cannot generate in any way specific empirical laws, though it can say that there must be empirical laws as such and that these are susceptible of cohering with one another.

Metaphysical Purposiveness (Theological Purposiveness)

²¹³Now it becomes obvious why Kant had to discuss aesthetic and scientific judgment in the same work, since not only are they both part of the faculty of judgment, but because scientific judgment is patterned, to some extent, upon art.

Metaphysical purposiveness is pwp on a grand scale. The problem it addresses is that of the gulf between nature and freedom:

The understanding legislates a priori for nature, as object of sense, in order to give rise to theoretical cognition of nature in a possible experience. Reason legislates a priori for freedom and for freedom's own causality, in other words, for the supersensible in the subject, in order to give rise to unconditioned practical cognition. The great gulf that separates the supersensible from appearances completely cuts off the domain of the concept of nature under the one legislation, and the domain of the concept of freedom under the other legislation, from any influence that each... might have had on the other. The concept of freedom determines nothing with regard to our theoretical cognition of nature, just as the concept of nature determines nothing with regard to the practical laws of freedom; and to this extent it is not possible to throw a bridge from one domain to the other. (C of J, 36)

However, a possible connection exists, since the effects of adhering to the moral law must be effects in the world of possible experience, though caused by free will. The final purpose of the world is the human being as moral subject under the moral law; the world can be conceived of as a system of purposes designed to further this final purpose, to stir moral feeling in human beings and to make the world a place conducive to their development as moral beings. The designer of such a world would be God, the ideal of the kingdom of ends as well as its ruler (a notion that has no theoretical validity but is valid for pure practical reason). (C of J, 331-334)

Kant is well aware that simply saying all of this is not enough, no matter how desirable any of it may seem. Therefore

he provides us with specific transitions from principles of judgment to principles that can only be described as metaphysical or theological. These are:

1. Beauty as a symbol of morality.
2. Beauty as a propaedeutic to the same.
3. The sublime as the means in nature by which our minds are turned to the supersensible.
4. The teleology of organic purposiveness and the mechanism of natural causes as having a possible basis in the supersensible.
5. Organic purposiveness as justifying us in applying purpose to the entire system of nature, though only as an idea, and regulatively.
6. Systematic purposiveness as regulatively suggesting that the world is structured as if it were designed purposively.

There is one more important element that has not been discussed. This is that practical reason supplies us with the content that we only dare hint at or point to in theoretical discussion i.e., a designer for the designed world (God), a moving force for purposes (freedom), and a final purpose for the world (the moral subject existing under the moral law).

This provision of determinate concepts by pure practical reason is one component of the most general basis of the transition from nature to freedom via judgment:

The understanding, inasmuch as it can give laws to nature a priori, proves that we cognize nature only as appearance, and hence at the same time points to a supersensible substrate of nature; but it leaves this substrate wholly undetermined. Judgment, through its a priori principle of judging nature in terms of possible particular laws of nature, provides nature's supersensible substrate (within as well as outside us) with determinability by the intellectual power. But reason, through its a priori practical law, gives this same substrate determination. Thus judgment makes possible the transition from the domain of the concept of nature to that of the concept of freedom. (C of J, 37)

Thus, the understanding can say nothing about the supersensible, judgment must think something about it for its own subjective purposes, and the content of that thinking is supplied by the determinate concepts of pure practical reason. However, since the subjective purposes of judgment involve theoretical cognition generally, and hence the understanding, the activity of the understanding is linked to that of the moral realm.

Does this negatively affect systematic pwp? I believe it does. Pwp in aesthetics is based on the free play of the cognitive powers as mediated by judgment; in knowledge it is based on the transcendental conformity of nature to the subsuming activity of our judgment. In order to render these notions susceptible of incorporation into the metaphysical task, they must be weighed down with a notion of regulative design. This in turn is a stronger claim, which, at least in

the case of systematic pwp, renders it vulnerable to sceptical criticism. It is a weak, and therefore relatively safe formulation, to say that we cannot scientifically investigate nature unless we assume that it will display empirical unity of some sort (the latter being completely indeterminate). It is a strong claim to say that we cannot investigate nature unless we think it is organized by an intelligent being, even if the claim is kept regulative.

If the critical project in general is construed as defending against Humean epistemic scepticism on the one hand, and Leibnizian/Wolffian dogmatism on the other, why do we find Kant giving priority to the metaphysical task and therefore diluting the immanent and transcendental force of essentially critical solutions?

It is not at all clear that any transcendental purpose is being served by attempting to unite nature and freedom; there is no realm of acting or knowing that is being constituted therein. One might suspect that it is the difficulty of having a moral agent located outside of possible experience while producing effects within it that has spurred Kant to the attempt at metaphysical unity. However, such a difficulty does not seem to be one that the critical project need be concerned with; the critical project has given us nature, freedom, and knowledge. Can it also give us a metaphysic?

The separation of freedom from nature and knowledge may be odd, but it is no odder in its way than Hume's description of his lack of a unified self. He dealt with such oddities by giving in to the force of nature. This oddness is only unbearable if one thinks that the critical project must provide some substitute for the soothing quality of the force of nature cited by Hume.²¹⁴ The ideal substitute for Kant would be the world unified through design with the kingdom of ends in such a fashion that we could be moral beings without being alienated from possible experience. The question is whether this unity of all experience is obtainable through critique; the reliance on design and analogy in the Critique of Judgment to accomplish the metaphysical task and the metamorphosis of transcendental principles of aesthetics and knowledge into teleological principles of the same, would suggest that the critical framework is now too limited for Kant's purposes. If this is indeed the case, then perhaps the Critique of Judgment is best called the closing phase of the critical philosophy.

²¹⁴I am not saying that this is a not a valid task; only that the parameters of the critical philosophy, transcendently based as they are on finding the principles of the possibility of knowledge, freedom, or any other domain, do not seem fitted for a project that attempts to connect all these domains.

CONCLUSION

Has the development of the concept of systematic pwp answered the problem of knowledge as formulated in Hume's problem of induction, thus completing the second tier in Kant's response to the former's scepticism? It would seem that, in a weak sense, it has, and it is difficult to see how a sceptical attack on knowledge could be answered except in a weak fashion, since strong claims of any kind tend to present more fronts on which to be attacked.

Thus, in order to set this up as a possible response to Hume, that is, to construe the validation of systematicity as applying to the weakest form of knowledge possible, it is necessary to construe Kant's arguments in the Analogies as the construction of possible experience in the weakest sense possible, since any stronger sense would poach on the territory of informal knowledge. In such a venture, it becomes necessary to proceed on assumptions not always explicit in Kant, and on clues that he did not develop. The most important of these, re causality, is the notion that since the categories schematize all experience, they cannot be the source of distinctions between subjective and objective experience, when these are taken to mean subjective and personal and objective and intersubjectively valid. Such

distinctions belong not to possible but to actual experience and are properly the domain of the special principles of judgment.

Thus the first tier of the response to Hume consists of Kant taking the players of the problem of causality, the so-called atomic occurrences, and showing that to be an occurrence for us entails certain pre-conditions, one of which is succession in time, which in turn provides those connections that "non-atomize" such occurrences. Of course these connections, as developed in Chapter Three, are so attenuated and formal that it seems initially that Kant has only won a Pyrrhic victory. And indeed, this is all he would win if the response to scepticism ends there. This important first tier in his response provides only the bare bones of a solution to the problems of scepticism; it validates possible but not actual experience.

One of the results of so weakly construing Kant's project, is the transformation in his scheme of certain concepts which, in Hume, have stronger meanings. In fact, causality has tumbled from its place in Hume's scheme, where it served as a component of knowledge proper, to being a schematized category, that is, a principle of the possibility of experience. Its function in knowledge is taken over in the Kantian scheme by a principle of empirical unity that is essentially a principle of induction. This serves as a defence against both Hume's atomism and his scepticism,

causality defending against the atomism, while systematic pwp defends against the epistemic scepticism, although in actual experience this separation of their functions is quite artificial, and in fact, as was seen in Chapter One, the epistemic scepticism is a highly developed form of the initial atomism.

This does not, however, mean that Kant's answer to Hume is either complete or free from complications, and this applies especially to the second tier of his response, concerning the problem of knowledge. For example, the metaphysical task of the Critique of Judgment interferes with the epistemic task, complicating any response to the problem of knowledge; the needs of inter-faculty unity make the claims to systematic pwp too strong, in the sense just mentioned. This makes systematic unity too vulnerable to scepticism, especially in light of Hume's attitude toward and arguments against the notion of design.

On a more modest scale, however, and setting aside any larger projects, even Hume would probably accept the need to presume empirical unity as part of our project of knowing, once it was shown that it was a device necessary to knowledge in the way he thought causality was. This is where, however, Kant's answer re the problem of knowledge stands as incomplete; it is cryptic and suggestive with regard to cognitive experience other than science, which renders his answer to the problem of knowledge primarily heuristic rather

than transcendental. This is problematic because the way in which systematicity guards against scepticism must be seen as not merely heuristic. If it is, then Kant has not got much farther than Hume. In what sense, based on the previous discussions, can systematicity be seen as more than a heuristic fiction for the motivating of our knowledge?

While the motivational power of systematicity cannot be denied, the key to its significance lies in the fact that the rules of systematicity are what "first creates the machinery in terms of which we look at nature and construe it."²¹⁵ This means, that in the synthesis a priori that is reflective judgment's ordering of knowledge, the synthetic element, the X that forms the basis of the application of systematicity to our knowledge, is nothing other than the possibility of knowledge, whether conceived at the sophisticated level of science or at the primitive and obscure level of everyday experience. It is in this sense that systematicity, the application of purposiveness without purpose to our knowledge by reflective judgment, is transcendental; it is a principle of the possibility of knowledge. And when that knowledge is taken to include even our everyday ordering of experience, the principle of systematicity is less heuristic than constructive; without such a principle of knowledge, we could

²¹⁵Buchdahl, Metaphysics and the Philosophy of Science, 512. He also, less happily, speaks, regarding both causality and systematicity, of "injecting" or "infusing" these notions into experience or scientific laws, terms that tend to undermine the syntheticity of both causation and induction.

not even make intelligible statements about ordinary experience, the kinds of statements that Hume has to make in order to set in motion his very doubts about the principle of induction.²¹⁶ At the same time, a validation of the principle of induction at the weakest end of the scale, informal knowledge, makes the principle available to more sophisticated knowledge, such as natural science, on a more than heuristic basis, i.e., on a transcendental basis.

For if the principle of reflective judgment is introduced first at the more sophisticated level of natural science, then it functions as a heuristic device, which is not in itself a bad solution to the problem of knowledge, but not one much above Hume's own solution, in fact, basically Hume's solution. Introduced at the lowest level, it has the synthetic and constructive nature that takes it beyond a belief or a heuristic device and it is this constructing role that validates its role at a more sophisticated level of knowledge. It also explains why it cannot be more than heuristic at the sophisticated level without an initial introduction through ordinary experience, for at the more sophisticated level science needs not only to explain but to justify its existence to the sceptic, whereas at the lower level the justification would be precisely that not even an

²¹⁶This argument for the constructive nature of systematicity is based, obviously, upon Lewis White Beck's characterization of Kant's general procedure against Hume. See Beck, "A Prussian Hume and a Scottish Kant" and "Once More Unto the Breach" in Essays on Kant and Hume.

ordinary judgment of experience, including the sceptic's judgment of experience, would be possible were it not for a systematizing principle of knowledge, i.e., one could not have actual experience without the principle that the future resembles the past.

But has Kant done this? Has he actually provided us with a lower level, weak justification of systematicity? Or has he only given the relatively unsatisfactory heuristic response? In fact Kant has done nothing so clear-cut, nothing for which he could be unequivocally praised or blamed. He indicates in the Dialectic of the Critique of Pure Reason that some general justification of knowledge is necessary, and indeed the entire project of the Critique would seem to demand this; by the time he gets to the Critique of Judgment, he has a more sophisticated apparatus for resolving the problem of knowledge, but, in great part, does not adequately develop this resolution independently of a strong metaphysical and theological argument. In any case, the development of a response to the problem of knowledge, whether in the immanent or theological context, is given with an eye to sophisticated natural science, not common or garden-variety judgments, though it is never denied that these exist and are cognitive.

Where Kant does develop a theory primarily oriented toward common judgment is in his aesthetic theory, and although this is not directly a theory of cognition, he does develop it in the context of the free play of the cognitive

faculties. He is also quite aware that there is such a thing as a common understanding which judges by concepts though these are "usually only principles conceived obscurely." (C of J, p.87) Here he is distinguishing between the common understanding and the common "sense" that allows people to assume a common aesthetic sensibility; but later on, when describing the workings of this common sense as aesthetic judgment, his description would fit a description of the common understanding very well:

[it is] a power to judge that in reflecting takes account (a priori), in our thought, of everyone else's way of presenting... in order as it were to compare our own judgment with human reason in general and thus escape the illusion that arises from the ease of mistaking subjective and private conditions for objective ones, an illusion that would have a prejudicial influence on the judgment. (C of J, p.160)

We compare our judgments to general human reason by "abstracting from the limitations that [may] happen to attach to our own judging". (C of J, p.160) In aesthetic judgment this occurs by way of attending to the formal elements of our experience of, say, the beautiful. However, none of what Kant has said up to then seems to be the exclusive property of aesthetic judgment; it could very well apply to ordinary cognitive judgment. But Kant does not so apply it, and does not, therefore, develop a theory of ordinary judgment, a gap that would seem to subvert his intended resolution of the problem of knowledge.

Nevertheless such a subverting would occur only in the event that Kant's response at the level of sophisticated natural science is completely heuristic and without any hint of something more constructive of knowledge, and it is not so. The use of systematicity, the use, that is, of the principle of reflective judgment, is an activity that conditions and creates the machinery of our cognition of nature through science; this conditioning or creating is the clue to the foundational role of reflective judgment in ordinary experience or cognition, but only a justification of the use of reflective judgment in ordinary experience would be a complete response to the sceptic and thus a validation of scientific systematicity that adequately distinguishes itself from that of Hume's. Kant is indeed transcendently justifying scientific activity, but without a transcendental analysis of ordinary cognitive experience the transcendental analysis of the basis of scientific activity threatens to degenerate into a heuristic and motivational theory.

So Kant has not merely left us with a gap in the transcendental argument, but has provided the essential thread of an argument that would fill that gap; it needs to be filled because Kant's own argument is not otherwise a completely satisfying response to scepticism, with one tier of the response left incomplete. It is a relatively satisfying response to Hume in one sense, because Hume did not deny the need for or existence of knowledge, but it threatens to be one

that is different only in degree from Hume's own characterization of the conditions for knowledge. As a heuristic solution Kant's response would not address the essence of a Humean scepticism about knowledge, but a more developed analysis of actual experience and its transcendental parameters, that is, a Kantian, though not necessarily Kant's, analysis, would be a complete response to such scepticism.

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