Chapter 6 The Intellectual Conditions of Human Cognition: Kant's Metaphysical Deduction

By the "intellectual conditions of human cognition" is meant the pure concepts of the understanding. Following Aristotle, Kant also terms them categories. The demonstration of their status as necessary conditions of the possibility of experience is the task of the Transcendental Deduction and will be the concern of the next chapter. But before this can be undertaken, Kant has the preliminary, yet indispensable, task of showing that there are such concepts and of specifying them. This is the concern of "On the Clue to the Discovery of All Pure Concepts of the Understanding" and the subject of the present chapter. In the second edition, Kant also refers to this section as the "Metaphysical Deduction," and he claims that in it "the *a priori* origin of the categories in general was established through their complete coincidence with the universal logical functions of thinking" (B159).[1]

In linking the categories with the logical functions of thinking, Kant attempted both to establish their credentials as the fundamental forms of discursive thought and to demonstrate the completeness of his list. The key to both parts of the project lies in the identification of discursive thinking with judging, which makes it possible to under-

stand the special status of these concepts by seeing their connection with the act of judgment, and to guarantee their completeness by providing an exhaustive account of the forms of judgment.

Unfortunately, in spite of the significance Kant attributes to it, the Metaphysical Deduction is among the most widely rejected parts of the *Critique*. Although the criticisms are varied, they focus largely on two main points. One concerns the completeness of the table of logical forms from which the categories are supposedly derived. Ironically, much the same criticism that Kant raised against Aristotle regarding the categories, namely, that he arrived at them in an ad hoc manner (A81 / B107), is applied to Kant's presentation of the forms of judgment on which his derivation of the categories is based. Thus, it is frequently charged that there is no systematic principle in terms of which the completeness of these forms can be understood; that Kant simply took them as he found them in the logic texts of his time; and, even worse, "doctored up" the table of logical forms to make it agree with his table of categories.[2]

The other major line of criticism concerns Kant's move from the forms of judgment to the categories. Here the objection is that Kant's attempt to derive categories or ontological concepts from logical forms is deeply misguided. Among contemporary critics, this charge is often justified by appealing to the development of modern logic. Regardless of how plausible Kant's project might appear within the context of classical Aristotelian logic, it is regarded as an obvious non-starter when viewed in the light of modern truth-functional and predicate logic.

Once again, Strawson may serve as spokesperson for this point of view. Appealing to the modern conception of "logical form," Strawson argues that, in order to yield a category, a logical form must express not simply a *possible* form but one that is necessary and fundamental. This reflects the view that the forms taken as primitive in a logical system are a matter of choice and that the only two ideas that are truly fundamental from the standpoint of modern logic are truth-functional composition and quantification. But, as Strawson points out, these "logical forms" are not likely sources of categories, since apart from the distinction between particulars and kinds, there are no ways in which we must conceive of objects in order to reason about them under these forms. Moreover, since the latter can already be inferred from the concept-intuition distinction, Strawson concludes that Kant's whole venture into the logical domain is beside the point.[3]

With these problems in mind, I have divided this chapter into three parts. The first discusses the completeness problem in the light of important recent

work on the topic.[4] The second and third address the derivation problem in two steps. First, basing the analysis on Kant's account of judgment in §9, it is argued that for Kant every form of judgment necessarily involves a certain mode or manner of conceptualization (logical function). Second, by examining the dense argument of §10, it is claimed that, while distinct from the categories, these functions provide the required "clue" to the discovery of the latter, because the two are isomorphic expressions of a single form of understanding operative in two domains (discursively in judgment and pre-discursively with reference to intuition).

I. THE COMPLETENESS PROBLEM

In §9 Kant presents his cryptic account of what he terms the "logical function of the understanding in judgment." The underlying claim is, "If we abstract from all content of a judgment in general, and attend only to the mere form of the understanding in it, we find that the function of thinking in that can be brought under four titles, each of which contains under itself three moments" (A70 / B95). This is the notorious completeness thesis, which, as I have already noted, has been the subject of much dismissive criticism.

Before addressing the problem itself, we must consider the claim that the whole endeavor is misconceived, since Kant himself denied both the need for and the possibility of anything like a "completeness proof."[5] Indeed, support for such a claim seems to be provided by a number of texts, most notably the following well-known passage in the B-Deduction:

> But for the peculiarity of our understanding, that it is able to bring about the unity of apperception *a priori* only by means of the categories and only through precisely this kind and number of them, a further ground may be offered just as little as one can be offered for why we have precisely these and no other functions for judgment or why space and time are the sole forms of our possible intuition. [B145–46][6]

Nevertheless, there are at least two compelling reasons why this should not be read as ruling out the project of establishing the completeness of the table of logical functions. First, the text itself does not require such a conclusion. It speaks not of *any* ground but of any *further* ground.[7] In the case of the categories, with which Kant is primarily concerned in the passage, what is denied is the possibility of providing a further ground, beyond the one just offered, namely, the synthetic unity of apperception. In the case of the logical functions, the parallel claim would be that no ground can be provided beyond the analy-

sis of the functions essential to discursive cognition sketched in §9.[8] Second, Kant himself unequivocally indicates in several places that establishing the completeness of the table is essential to his project, since without it the determination of the categories and their systematic completeness (which is the main order of business) would be impossible.[9] Thus, whatever its inherent difficulties, the completeness problem must be addressed by any serious interpretation of the *Critique*.

Fortunately, the problem becomes considerably more tractable once we narrow its scope. Even though Kant refers simply to judgment and its forms, it is clear from his analysis that he has only certain judgment types in mind: those that determine an object through concepts, which Kant generally terms "judgments of the understanding," or "logical judgments."[10] In light of the crucial connection between judgment and discursive thought, these will be referred to here as "discursive judgments." They include all judgments capable of serving as premises of syllogisms but exclude, for example, mathematical judgments, which are non-discursive for Kant since they rest on the construction of concepts rather than on concepts, as well as judgments involving indexicals and proper names.[11]

To clarify matters further, it is useful to break the completeness problem down into two parts corresponding to the two organizing principles of the table. One deals with the four titles under which the twelve functions are grouped; the other (and more difficult part) with the three moments falling under each title.

A. The Completeness of the Titles

The four titles or basic headings into which Kant divides judgments in terms of their form are: quantity, quality, relation, and modality. Apart from relation, which replaces the then standard division of judgments into simple and complex, there is nothing remarkable about this list; nor is there meant to be. As Kant himself notes, he found before him "already finished though not yet wholly free of defects, the work of the logicians" (Pro 4: 323; 115–16). What is new, however, is the systematic significance attributed to this set of headings and the claim that each of the logical functions necessarily falls under one of them.

Since Kant makes this claim without further argumentation and since it is hardly self-evident, we must assume that he took it to be a consequence of the account of judgment offered in the first section of the "Clue." As we saw in chapter 4, the notion of function is central to this account. Indeed, within a single paragraph of perhaps unparalleled density Kant claims that "concepts

rest on functions" (in contrast to intuitions, which rest on affections); defines 'function' as the "unity of the action of ordering different representations under a common one"; characterizes all judgments as "functions of unity among our representations"; and suggests that the "functions of the understanding can . . . all be found together, if one can exhaustively exhibit the functions of unity in judgments" (A68–69 / B93–94). Moreover, the following section, which supposedly explains why an exhaustive exhibition is possible, is entitled "On the logical function of the understanding in judgments"; and its central claim is, "If we abstract from all content of a judgment in general and attend only to the mere form of the understanding in it, we find that the function of thinking can be brought under four titles, each of which contains under itself three moments" (A70 / B95).

Although each of these mentions of 'function' is significant, our present concern is largely with the last four. First, by the "logical function of the understanding in judgments" is to be understood its function as analyzed in general as opposed to transcendental logic. The logical function of the understanding is, therefore, to be contrasted with its putative "real function," which at this stage of the analysis is very much in doubt and is, in any event, a concern of transcendental logic. Second, the "functions of the understanding," which are what Kant is trying to determine, are just the logical functions of judgment, that is, forms of conceptualization operative in judgments of the corresponding form. Correlatively, the "functions of unity in judgment" are what is supposedly being exhibited in the table. Thus, if the project is to make sense these obviously must be distinguished from each other.[12] Third, what must be brought under the four titles are the functions of thinking in judgments, which suggests that these should be seen as specifications of the generic function of thinking as manifested in all discursive judgments, regardless of their content.

In contrast to the definition, all of these uses of 'function' appear to take the term in the familiar Aristotelian-physiological sense of task. Accordingly, the basic task or function of discursive thought is to judge, and Kant's claim is that this may be broken down into a number of sub-functions that fall into certain types. Thus, the headings refer to the types of sub-function required for a successful exercise of the generic function. Appealing to a biological analogy, one might say that just as the function of the eye, namely, to see, may be broken down into several sub-functions, such as color, shape, and distance vision, so the function of the understanding, namely, to judge, may be broken down into four (and only four) types of sub-function: quantity, quality, relation, and modality.

In order to test the aptness of this analogy, let us briefly revisit Kant's functional account of judgment in the first section of the "Clue." As we saw in chapter 4, Kant's basic claim is that the essential task of a (discursive) judgment is to produce an object-related unity of representations under a concept. The underlying assumption, which is first made explicit in the B-Deduction (§19), is that only such a relation of representations is capable of a truth value. And given this result, it is relatively easy to see that every judgment necessarily involves at least three sub-functions corresponding to the first three of Kant's titles.[13]

Keeping to the order in Kant's table, the first of these sub-functions may be characterized as defining an extension. Thus, in Kant's model judgment "All bodies are divisible," the predicate divisibility is related to everything falling under the concept of 'body'. This is the function expressed in the title "quantity," and it is apparent that it is essential to the exercise of the generic function of judging, since without it, it would be impossible to determine the scope of the predicate of the judgment and, therefore, assess its truth value.

The second essential sub-function is that of making a claim (assertion or denial) on the basis of the determination of the scope of the predicate. This is the function expressed in the title "quality." It is likewise essential to judgment, since without it there would be nothing to assess with respect to truth value. Moreover, quality, so construed, clearly presupposes quantity, since the claim to be assessed necessarily involves a quantified subject (for example, all, some, or a single body).

This brings us to the function of relation. In the case of the simple subject-predicate judgment, the judgment clearly requires a determination of the relation between the two concepts being connected. And, as we shall see shortly, in complex judgments, whose elements are themselves judgments rather than concepts, what requires determination is the relation between the constituent judgments. In other words, since judgment involves a mediate representation of an object or a "representation of a representation" of it, it is necessary to determine which representation is mediated by which or, equivalently, which is the "condition" and which the "conditioned." This, then, is the judgmental function of relation, and it too is clearly essential to judgment. Moreover, just as quality presupposes quantity, the function of relation presupposes both, since these jointly provide the conditions of the determination of the relation expressed in the judgment.

If anything, however, this analysis appears to be *too successful*. The problem is that it seems to provide a complete account of the cognitive tasks requisite for a judgment like "All bodies are divisible," without any reference to modality. Ac-

cordingly, if the completeness claim is to be substantiated, the latter must somehow be brought into the story. Here the crucial text is Kant's remark,

> The modality of judgments is a quite special function of them, which is distinctive in that it contributes nothing to the content of the judgment (for besides quantity, quality, and relation there is nothing more that constitutes the content of a judgment), but rather concerns only the value of the copula in relation to thinking in general. [A74 / B99–100]

At first glance it may seem peculiar for Kant to describe quantity, quality, and relation, which are supposedly formal features of discursive judgment as such, as themselves parts of the "content" of judgment. Nevertheless, this becomes understandable once one sees that Kant's point is that modality, unlike the other function types, has no designated role within the judgment itself (as is evidenced by the fact that "All bodies are divisible" is a perfectly well-formed judgment with no reference to modality). Accordingly, one might say that the first three titles are exemplified in the "formal content" of the judgment, that is, its judgmental structure. Moreover, as such, they are expressed in the judgment by modifiers like "all" or "some" and connectives like "if-then," "either-or."

By contrast, modality, which on the Kantian account is "invisible" in the propositional form of the judgment, is said to concern the "value of the copula in relation to thinking in general."[14] This brings out the idea that, rather than referring to an intrinsic feature of a given judgment, viewed as an epistemic unit, modality is concerned with the relation between a particular judgment and a given body of knowledge. It thus concerns what one might term the "epistemic value" of a judgment ("the value of the copula"), and the function of modality is to integrate a judgment within a presupposed system of knowledge. That is why, unlike the other function types, it does not form part of the "content" of a judgment and has no direct propositional expression in it.[15]

B. The Completeness of the Moments under Each Title

The second part of the completeness thesis, namely, that there are precisely three moments falling under each of the four titles, is considerably more controversial. Indeed, William and Martha Kneale undoubtedly speak for many when they remark that "[t]he fact that he [Kant] is able to provide three species under each heading is obviously a matter of accident. For the species in any one set are not really co-ordinate, and there is no common principle requiring trichotomy."[16]

Recent scholarship, however, has raised the possibility of a more positive assessment of Kant's notorious trichotomies, even though it has not yielded a generally accepted solution to the problem. On the one hand, Reinhardt Brandt, while denying that there is anything like a strict proof, argues that the case for the systematic, non-arbtirary nature of the trichotomous arrangement is to be found in the remarks that Kant attached to the table (A71 / B96–A76 / B101).[17] On the other hand, Michael Wolff takes Kant at his word when he suggests that these remarks were intended merely to guard against certain misunderstandings and insists, contra Brandt, that there is a genuine "completeness proof."[18]

In considering this complex issue, we shall begin with Kant's explication of the table. Here particular attention is usually paid to the first two headings, where Kant seems to import considerations from transcendental logic in order to generate his trichotomies. The obvious problem is that any appeal to transcendental logic in order to derive the moments of judgment in general logic would be viciously circular, since the whole purpose of the Metaphysical Deduction is to derive the categories of the former from the logical functions of judgment specified (supposedly on independent grounds) in the latter.

Kant raises the specter of such a circle in his explication of the moments of quantity by noting that logicians rightly claim that in the use of judgments in syllogisms, singular judgments can be treated like universal ones. This suggests that a consideration of quantity merely from the standpoint of general logic would yield the dichotomy: universal and particular, thereby obviating the need to recognize the singular judgment as a logically distinct form. One might well argue for the inclusion of the singular judgment on the grounds that it has a distinct linguistic expression, but Kant builds his case instead on these initially suspicious grounds:

> If . . . we compare a singular judgment with a generally valid one, merely as cognition, with respect to quantity, then the former relates to the latter as unity relates to infinity, and is therefore in itself essentially different from the latter. Therefore, if I consider a singular judgment (*judicum singulare*) not only with respect to its internal validity, but also, as cognition in general, with respect to the quantity it has in comparison with other cognitions, then it is surely different from generally valid judgments (*judicia communia*), and deserves a special place in a complete table of the moments of thinking in general (though obviously not in that logic that is limited only to the use of judgments with respect to each other). [A71 / B96–97]

What makes this seem initially suspicious is the reference to "cognition in general" as opposed to "internal validity." Is not the former supposed to be the

domain of transcendental logic and is not general logic, which abstracts from the properly epistemological question of the relation of cognition to its object, limited precisely to the latter?[19] Although the reference to infinity here is mysterious (why not totality?), Kant's main point is relatively clear and does not involve a vicious circularity. First, general logic is not limited to syllogistics. It also includes a doctrine of judgment as such (indeed, this is its core) and is properly concerned with the forms of the latter considered as "functions of unity." Second, the fact that two moments may be treated as equivalent from the standpoint of syllogistics does not mean that there is no distinction to be drawn between them. In short, Kant's position seems to be that, while the inclusion of the singular judgment as a separate moment is important largely because of the distinct epistemic function of such judgments, its distinction from the particular judgment is still one that falls within the domain of general logic.

A similar analysis is applicable to the moments of quality. The basic dichotomy is between affirmative and negative judgments, to which Kant adds the infinite judgment, which is an affirmative judgment with a negative predicate ("The soul is not mortal"). In explaining this addition, Kant remarks that "in a transcendental logic infinite judgments must also be distinguished from affirmative ones, even though in general logic they are rightly included with the latter and do not constitute a special member of the classification" (A72 / B97). Since Kant here refers to general logic as such (rather than merely to syllogistics), the explanation used in the case of quantity is unavailable. Moreover, the circularity worry is further exacerbated by Kant's explanation, which consists in pointing out that infinite judgments perform a limitative function that is quite distinct from both affirmation and negation, and which therefore "must not be omitted from the transcendental table of all moments of thinking in judgments, since the function of understanding that is thereby exercised may perhaps be important to the field of its pure *a priori* cognition" (A73 / B98).[20]

In order to save Kant from the circularity charge here, it is necessary to distinguish between what general logic is primarily concerned with and what it is capable of providing. In other words, the fact that the distinction between an affirmative and an infinite judgment may be of no use to general logic as such does not mean that the distinction cannot be drawn within it. Indeed, that it can be is evidenced by contrasting the infinite judgment, "The soul is not mortal," with the straightforwardly affirmative, "The soul is immortal." Clearly, the soul does not belong to the class of immortal things simply in virtue of being excluded from the sphere of the mortal. Inanimate objects, such as stones, are excluded from the latter as well without thereby being included among the immortals.

The moments of relation seem to raise the opposite of the problem encountered in the first two headings. Whereas the problem there was the seemingly gratuitous inclusion of a judgment form, the present problem concerns an exclusion, namely, that of the copulative judgment (*judicium copulativum*), which Kant's contemporary readers would naturally expect to be included.[21] As the name suggests, a copulative judgment is one in which either two (or more) predicates are affirmed (or denied) of a single subject or a single predicate is affirmed (or denied) of two (or more) subjects (R3089 16: 652).[22] An example of the first type is "God has created all things and rules over them," and of the second type "God and one's neighbor [*die Nachste*] should be loved" (R3088 16: 652). Thus, since Kant was well aware of such judgments, the question is why he omitted them from the moments of relation.[23]

The answer lies in the difference between Kant's understanding of the logical function of relation and the distinction between simple and complex judgments it replaces. The latter is a distinction between propositional forms, which has nothing to do with distinct functions of thought in judgment. In other words, it does not address the question of the distinct sub-tasks performed by the understanding in an act of discursive judgment. In the case of relation, we have seen that this sub-task is to connect the elements combined (be they concepts or judgments) in a relation of condition and conditioned in such a way that the connection first constitutes a judgmental or epistemic unit, that is, a proposition that may be affirmed or denied. In the case of the hypothetical and disjunctive forms, the component judgments are merely taken problematically within the judgment (neither affirmed nor denied) and only the connection between them constitutes the proposition (UE 8: 194n; 289).[24] By contrast, the elements of a copulative judgment are already viewed as complete judgmental units or propositions that may be affirmed or denied independently of their connection in the judgment. Consequently, their combination does not from Kant's point of view constitute a distinct moment of thought.[25]

Since the case of the moments of modality is relatively non-controversial, it does not require detailed discussion. The main worry is why Kant does not include impossibility as a distinct modality.[26] The answer lies in his view that impossibility is simply the negation of possibility and not a distinct modality. That he viewed the matter in this way is clear from the corresponding table of modal categories, where he places the modal pair: possibility-impossibility (A80 / B106).

Even if all of this is granted, however, it does not amount to anything like a proof (or even a systematic explanation) of Kant's trichotomous divisions.

Thus, if such is to be provided we must look elsewhere, and, as Michael Wolff has suggested, a good place to look is an obscure footnote that Kant appends to the Introduction in the third *Critique*. As Kant there remarks:

> It has been thought suspicious that my divisions in pure philosophy almost always turn out to be threefold. But that is in the nature of the matter [*in der Natur der Sache*]. If a division is made *a priori*, then it will be either analytic, in accordance with the principle of contradiction, and then it is always twofold (*quodlibet ens est aut A aut non A*). Or it is synthetic; and if in this case it is to be derived from concepts *a priori* (not as in mathematics, from *a priori* intuition corresponding to the concept), then, in accordance with what is requisite for synthetic unity in general, namely (1) a condition, (2) something conditioned, (3) the concept that arises from the unification of the conditioned with its condition, the division must necessarily be a trichotomy. [KU 5: 197n; 82–83]

As Wolff points out, the note contains a rather unusual and highly abstract exercise in conceptual analysis.[27] What is being analyzed is the concept of an *a priori* division in "pure philosophy," that is, one based entirely on concepts, without any appeal to intuition. Mathematical divisions, say between the various possible types of triangle or regular polygons, are likewise *a priori;* but they are determined by the forms of a given figure constructible in pure intuition and, therefore, can have varying numbers of members.[28] By contrast, the possibilities for conceptually based divisions are severely limited. Apparently viewing such a division as itself a kind of judgment, Kant reasons that it must be either analytic or synthetic. Since the former is based on the principle of contradiction, it is always dichotomous. Correlatively, by a "synthetic division" is to be understood one that is not analytic, that is, not based on the principle of contradiction. Consequently, it is presumably not dichotomous.

We are thus led to ask on what principle a synthetic division could be based, assuming that it can be neither a pure intuition nor the principle of contradiction yet is somehow possible *a priori* (that is, by means of a consideration of the relation of the concepts involved). The answer suggested by the note is that the division must conform to the specified conditions of synthetic unity, which require a trichotomy.

Nevertheless, this only shifts the question, since we now want to know why a non-analytic *a priori* division must constitute a synthetic unity. Although Kant does not explicitly address this issue in the note, his view seems to be that, as *a priori*, the division must be complete and that this requires that the disjuncts constitute a synthetic unity.[29] In the case of an analytic division, the

completeness is immediately apparent, because the contradictory opposites (*A* or non-*A*) exhaust the domain. In the case of a non-analytic division, however, where the disjuncts (*A* and *B*) are not related as contradictory opposites, this does not occur. Accordingly, a dichotomy here does not guarantee completeness.

It may be useful here to consider a division from the domain of practical philosophy: that of morally assessable acts. Here the fundamental division is between the required and the prohibited. In Kant's terminology, the former may be considered the "condition" and the latter the "conditioned" (in the sense that it is defined in opposition to the former). But the division is manifestly incomplete, since it leaves out a class of acts that are neither required nor prohibited, namely, the permitted. Moreover, rather than being simply an additional alternative, standing in no discernible relation to the first two, the latter is related positively to each of them, without being reducible to either. It includes the first disjunct under itself, since required acts are clearly permissible; while it shares with the second the property of falling within the class of non-required acts (the contrary of the first disjunct). Moreover, this enables it to serve as a "mediator," thereby producing synthetic unity and completing the division.

Admittedly, the most that this shows is that trichotomies of this form are *sufficient* to produce the required synthetic unity; not that they are also *necessary* and, therefore, that all synthetic divisions in pure philosophy must be trichotomous. Nevertheless, at this juncture Kant would presumably be prepared to argue (as he generally does) by elimination. The crucial point is that, since the usual ground of *a priori* synthesis, namely, pure intuition, has been ruled out by the nature of the division (as one in "pure philosophy" rather than mathematics), we are left with concepts as the only conceivable means to produce synthetic unity. But it seems clear that this task cannot be assigned to more than one concept, since the question of synthetic unity would break out again with regard to these new concepts. Thus, given the terms of his analysis, Kant seems entitled to conclude that a synthetic unity is possible in *such* divisions *only if* the disjuncts opposed as condition and conditioned can be united in a third concept.

It remains to be seen whether this abstract analysis, which Kant introduced in an effort to justify a quite different set of trichotomies, is applicable to the division of logical functions. This requires showing that the three functions falling under each heading constitute a synthetic unity in the designated sense. Although this may seem to be a daunting task, it can be accomplished fairly expeditiously on the basis of what we have already learned.

Quantity. As we have seen, universal and particular constitute the initial disjuncts, and the problem concerns the addition of the singular judgment as a distinct "moment of thought," which yet somehow combines these disjuncts. The commonality between the singular and the universal judgment may be seen from their functional equivalence within syllogistics, while that of the singular with the particular consists in their joint occupation of the domain of the non-universal. Thus, the function of singularity stands to the functions of universality and particularity in a manner analogous to that of the morally permissible to the required and the prohibited. Consequently, it completes the division of the moments of quantity by enabling them to constitute a synthetic unity.

Quality. Here the initial dichotomy is between affirmation and negation (condition and conditioned), and the infinite judgment is assigned a distinct limitative function. Thus, what must be shown is that the infinite judgment combines the first two, enabling the division to constitute a synthetic unity. And once again, it is clear from the previous consideration of this function that it does. As we have seen, it shares with negation the function of excluding a predicate from the domain of the subject, but it does so through an affirmation regarding the subject. Accordingly, here again the conditions of synthetic unity are met.

Relation. Here the situation is more complex, since the initial problem was not so much with the inclusion of the disjunctive function as with the exclusion of the copulative one. Nevertheless, it can be maintained that the conditions of synthetic unity apply here as well.[30] The basic opposition is between the categorical and the hypothetical functions. In the former something is affirmed (or denied) unconditionally, and in the latter only under a condition. But the disjunctive function shares with the categorical the function of affirming (or denying) something unconditionally—to cite Kant's example, "The world exists either through blind chance, or through inner necessity, or through an external cause" (A73 / B93)—while sharing with the hypothetical the function of making its claim on the basis of a relation of propositions, which, taken individually, are merely problematic.

Modality. The primary opposition is between merely problematic and assertoric judgments. The former (which serve as components of hypothetical and disjunctive judgments) are deemed capable of a truth value, though, as prob-

lematic, this value is undetermined. By contrast, the truth value of the latter is determined by their connection with principles of the understanding. Apodictic judgments, however, are those whose truth is determined simply on the basis of their capacity to be true, which is what gives them their status as necessary truths. As Kant puts the matter in his discussion of the modal categories, "**Necessity** is nothing other than the existence that is given by possibility itself" (Bɪɪɪ). Thus, here again, the third function combines essential features of the other two, thereby producing a synthetic unity.

II. FORMS AND FUNCTIONS OF JUDGMENT

Of itself, however, the demonstration of the completeness of the table of judgments does not enable us to understand the connection between the forms of judgment contained therein and the categories. Moreover, we have seen that critics like Strawson, appealing to the conception of logical form operative in modern logic, question not merely Kant's catalogue of these forms but also, and primarily, the whole project of moving from them to anything like Kantian categories.

The response to this line of objection, which is also intended as an account of Kant's procedure, falls into two parts. First, it must be insisted that the modern conception of logical form cannot be seen simply as a replacement for the Kantian conception and, therefore, cannot be appealed to in order to undermine the feasibility of Kant's own project. Second, we shall see that the Strawsonian criticism is based on a serious misunderstanding of the relationship between logical forms (in Kant's sense) and the categories.

With regard to the first point, we saw in chapter 4 that Kant understands by "forms of judgment" the basic forms or modes of discursive thinking. As Béatrice Longuenesse points out, this reflects Kant's rather traditional conception of the subject matter of logic as the universal rules of discursive thinking.[31] She further emphasizes that Kant's primary focus is on the forms of *judging* as a mental activity rather than on the forms of the *judgments* resulting from this activity.[32] Although the latter provides the starting point of Kant's account in the "Clue," it is really directed to uncovering the former. Moreover, this enables us to appreciate the radical gulf separating Kant's conception of "logical form" from the one operative in modern logic, where, as Longuenesse notes, it generally refers to the logical constants and the rules for their derivation and combination assumed in a given logical calculus.[33]

Again following Longuenesse, we can see that this gulf also enables us to appreciate the irrelevance of a critique of Kant's procedure based on the latter conception of logical form. Although Strawson is undoubtedly correct in denying that *this* notion of logical form can plausibly be taken to provide a clue to the discovery of a privileged set of concepts, it hardly follows that the Kantian conception, properly understood, cannot provide one. Nor may it be argued, as it often is, that the great formalizing power of modern logic of itself totally invalidates the Kantian approach. This great power is not to be denied; the point is rather that truth-functional logic and quantification theory have little to add to the analysis of discursive thinking per se. Moreover, this is no accident, since logicians from Frege to the present tend to dismiss any such concern as psychologistic and, therefore, as not constituting part of logic properly construed.[34]

Unfashionable as it may be, however, it is a fundamental premise of this book that Kant's concern with mental acts is not to be construed in a psychological sense. Or, if one insists that *any* account of mental acts is by definition psychological, then the claim is that the account is not psychological in a pejorative sense. By the latter is meant not only one that views Kant as engaged in some illicit form of metaphysical reflection about a noumenal self and its superempirical activities (Strawson's "imaginary subject of transcendental psychology"),[35] but also one that sees Kant as offering a naturalized, empirical cognitive psychology, which undermines the essentially normative nature of his account of mental activity.[36] As transcendental philosopher, Kant's concern is with the conditions of discursive cognition as such. Consequently, if, as Kant maintains (and Strawson apparently concurs), human cognition is discursive, it seems at the very least plausible to look to the nature of judgment in order to uncover the intellectual conditions of such cognition.

Assuming this, together with the previously noted distinction between forms of judging and forms of judgment, the suggestion is that the latter provide a clue to the understanding of the former and these, in turn, are the key to discovering the categories. Essential to this account is the relation between the notions of "form" and "function" of judgment. Although intimately related (indeed, Kant often uses these terms interchangeably), there is, as Longuenesse points out, an important distinction to be drawn between them, which is essentially one of process or activity and product.[37] In other words, the specific "forms" of thought or judgment arise from the various expressions of the generic "function" of thinking or judging, which Kant describes as "the unity of the action of bringing different representations under a common one" (A68 /

B93). Thus, with due apology to Frank Lloyd Wright, one might say that for Kant "form follows function."

In order to see the relevance of this to our present concerns, it is important to recall Kant's definition of 'function' as "the unity of the action of ordering different representations under a common one" (A68 / B93). The "action" in question is judgment, and its "unity" is the underlying rule in accordance with which the different representations are connected in a judgment.[38] Since this rule is itself a concept or way of conceptualizing, it suggests the possibility that there may be such a rule embedded in every judgmental form, specifying the manner in which the representations must be connected insofar as one judges under that form. Such a concept rule would not be a category, since it is not a "concept of an object in general"; but it might appropriately be characterized as "precategoreal" or even "proleptically categoreal," in much the same sense as we saw in chapter 4 that an unconceptualized intuition might be viewed as proleptically a representation of an individual.

Although a similar analysis can be extended to all twelve of Kant's judgment forms, we shall limit our consideration to the three relational ones: the categorical, hypothetical, and disjunctive forms. Since Kant explicitly connects these with the three most important categories (substance, causality, and reciprocity or community), an analysis of the way in which these forms "follow" or embody conceptual functions should suffice for present purposes.

To begin with the least controversial, it seems clear that the exercise of the categorical function requires the concept of a subject of which properties may be either affirmed or denied and, therefore, a capacity to distinguish between a subject and its properties. Correlatively, the subject of a categorical judgment (the object judged about) is always conceived of as a bearer of properties. For example, in the judgment "Socrates is mortal," the subject (Socrates) is conceived of as the owner of a property (mortality), which requires the distinction between a subject and its properties. Unless one could do this, one could not form the judgment.

It does not follow from this, however, that one must possess or apply the pure concept of substance, which, in one place, Kant defines as the concept of something that can be conceived of only as subject, and never as predicate of something else (B129),[39] in order to make judgments of the categorical form. This is not merely the concept of something that *can* serve as the bearer of properties but of something that *must* always be conceived of in that capacity, that is, of something that must always be taken substantivally. But it is obvi-

ously not the case that this concept is required in order to judge categorically, since we can make perfectly good categorical judgments about properties and abstract objects, as well as the usual substance candidates.[40]

Nevertheless, this does not have the negative implications that Kant's critics tend to assume. The logical function is a rule for the conceptualization of the content of a categorical judgment. It expresses the necessity of conceiving of the subject of such a judgment as a bearer of properties and, therefore, as not itself a property of something else. This amounts to the claim that, in order to judge categorically, it is necessary to consider the subject *as if* it were a substance, not, to be sure, in the full-blown ontological sense but in the logical sense that within the judgment it must be taken substantivally. The rule "never a predicate of anything else" thus applies *within* a given judgment.

By contrast, the ontological concept or category of substance may be characterized as the thought of some entity that must be conceived of as subject in *every* judgmental context. Although it certainly follows from this that the logical function or "judgmental concept" operative in the act of making judgments of the categorical form is not to be equated with the ontological concept or category, it also follows that the two are intimately related. Indeed, if this analysis is correct, the latter arises from the former through a kind of hypostatization or projection onto an object, which may or may not be legitimate in a particular instance.[41]

The analysis of the hypothetical form of judgment requires a somewhat different treatment, but it yields a similar conclusion. To begin with, this form should not be construed in truth-functional terms as the material conditional.[42] To judge hypothetically, in the sense in which such a judgment is relevant to Kant's argument, is to assert a connection between two propositions, such that the assumption of the truth of the one justifies the inference to the other. Each of these propositions, taken individually, is viewed as merely problematic; the judgment asserts only the conceptual connection between them. Kant expresses this by remarking, "It is only the implication [*Konsequenz*] that is thought by means of this judgment" (A73 / B98).

It follows from this that the exercise of the hypothetical function presupposes what one might term an "ordering rule" for the sequence of propositions linked in the judgment. Moreover, this rule may be defined as the relation of ground and consequent. Just as it is necessary in the case of the categorical judgment to determine which element is to be thought of as subject and which as predicate, so it is necessary in the case of the hypothetical judgment to deter-

mine which of the propositions is to provide the ground or basis ("inference ticket," in Ryle's sense) for the assertion (or negation) of the other.[43] Accordingly, the claim is that the concept of the relation of ground and consequent is the rule embedded in judgments of the hypothetical form. The justification for this is that to judge hypothetically just is to link the items connected in the judgment in accordance with this rule.

The point is nicely illustrated by Kant's own example of a hypothetical judgment: "If there is perfect justice, then obstinate evil will be punished" (A73/B98). First, this judgment expresses a connection between the thoughts of two states of affairs, neither of which is deemed in the judgment to be actual. As such, it fits the previous characterization of the hypothetical form. Second, these two problematically conceived states of affairs are thought as connected in such a way that the assertion of the first provides a ground for the assertion of the second. In short, the judgment expresses the thought of the dependence of a state of affairs in which the obstinately wicked are punished on one in which there is perfect justice.

This dependence need not, however, be understood in causal terms. The reason we assume that the obstinately wicked will be punished in a world in which there is perfect justice is not that we presuppose that the latter must contain some causal mechanism capable of accomplishing this task (although it might), but simply that punishment for the obstinately wicked constitutes part of the concept or description of a world in which there is perfect justice (at least it constitutes part of Kant's concept of such a world). In short, the judgment is analytic; the concept of such a world provides the logical (though not the "real") ground of the punishment of the obstinately wicked.

This shows that we can dismiss as misguided Guyer's worry when he remarks, "[I]t is hard to see why we should be able to make hypothetical—that is, 'if . . . then ——'—judgments only if we can detect causal connections among objects. . . ."[44] Like similar remarks in Strawson and other dismissive critics, this is correct but beside the point. For contrary to this widely shared assumption, Kant's claim is not that we can judge hypothetically about the world only insofar as we possess and apply the concept of causality; it is rather that the exercise of the hypothetical function necessarily involves (indeed, consists in) an ordering of problematic judgments by means of the relation of ground and consequent.

This does not, however, undermine the move from judgmental form to pure concept, which is the concern of the Metaphysical Deduction as a whole. It

shows instead that this move is indirect, mediated by the analysis of judgment in which to judge under a given form is to exercise a certain logical function. Although the logical relation of ground and consequent is not equivalent to the causal relation (this was the mistake of rationalists, such as Spinoza, as well as occasionalists who limited genuine causality to God), it is arguably a necessary condition of the possession of the latter concept. Since this concept is just that of the relation of a *real* (rather than a merely) logical ground to its consequent, one could not have the concept in this form unless one already had the generic concept of the relation. Moreover, this closely parallels the connection between the categorical form of judgment and the pure concept of substance. In both cases, the move from judgmental form to category turns on an ontological application of the logical function embedded in all judgments of the corresponding form.

Unfortunately, things are not as straightforward with regard to the correlation between the disjunctive function and the pure concept of community. Indeed, Kant himself recognizes that the correlation in this case is far from obvious, and in the second edition he adds an explicit defense of it (B111–13). As it stands, however, this defense is not entirely convincing because of an unclarity concerning the nature of the logical function involved. Kant begins by noting that in a disjunctive judgment the elements combined (problematic judgments) are viewed as constituting a whole (in the sense that they exhaust the possibilities), and he suggests an analogy between this and the thought of a collection of things as constituting a whole. But this analogy breaks down because in the case of a disjunctive judgment, which Kant understands as an exclusive disjunction, the assertion of one element entails the negation of the others, whereas in the case of the pure concept, which involves the thought of reciprocal connection, the assertion of one element entails the assertion of the others. In short, the logical function appears to be that of exclusion, whereas the corresponding category is the concept of a reciprocal connection.

Nevertheless, a connection between them may be preserved, if we take the logical function involved in disjunctive judgment to be coordination rather than exclusion. Moreover, there is support for this reading in the fact that Kant contrasts the relation of coordination expressed in judging under this form with that of the subordination operative in hypothetical judgments. As Kant suggests, this is analogous to the (ontological) coordination of items thought under the category of community. Accordingly, the case for a correspondence between judgment form and category can be made here as well, provided that we focus on the underlying logical function.[45]

III. THE METAPHYSICAL DEDUCTION "PROPER": FROM GENERAL TO TRANSCENDENTAL LOGIC

The preceding analysis fell within the domain of general logic, though in discussing the connection between logical function and category I oriented it toward transcendental logic. The aim of what is here termed the metaphysical deduction proper is to ground the connection between the two "logics" on the basis of a principle, thereby justifying the claim that the judgmental forms of the former provide the "clue" to the discovery of the basic concepts of the latter.

The underlying principle is that it is one and the same understanding, governed by the same set of rules or functions, that is operative in both domains. In other words, the argument turns on an assumed isomorphism between general and transcendental logic and the functions of thought analyzed in each. Or, more precisely, it turns on an isomorphism between the logical and the real use of the understanding, that is, between its use in judgment, in which it connects pre-given representations by bringing them under concepts, and its use in determining sensible intuition, thereby generating a determinate content of thought.[46]

This strategy involves two closely related and significant drawbacks. One is an unwelcome additional level of obscurity. In introducing the radically new thesis that the understanding has a real use (as a condition of cognition), Kant is forced to appeal in the first five paragraphs of §10 to some of the central and most difficult aspects of his transcendental account of cognition, including the doctrine of synthesis and the respective transcendental functions of the imagination and the understanding. The former is said to synthesize our representations, and the latter to "bring this synthesis to concepts" (A78 / B103). Since Kant does little to prepare the reader for any of this, much of what he says in these paragraphs seems like a series of bald assertions, which are only intelligible in the light of his subsequent discussion in the Transcendental Deduction.

The second problem concerns the apparent circularity of this approach. Even if the preliminary discussions of the transcendental functions of the imagination and understanding were sufficiently intelligible in their own terms, the fact remains that Kant has not yet shown that these faculties have a real or transcendental use or, more generally, that there is a subject matter for a transcendental logic. Once again, Kant only purports to establish this in the Transcendental Deduction. Consequently, the Metaphysical Deduction presupposes the results of the Transcendental Deduction, while the latter, in turn, presupposes the results of the former, since it begins with the assumption that a defini-

tive set of pure concepts or categories has already been established as a matter of fact (the *quid facti*) and proceeds to address the question of their validity (the *quid juris*).[47]

Nevertheless, neither of these problems creates an insuperable difficulty. First, even though the obscurity of many of the details of Kant's account in the first five paragraphs of §10 is undeniable, it does not preclude an appreciation of the basic point he is trying to make in the section as a whole. Second, the circularity is not vicious, since Kant's account of the real or transcendental function of the understanding, which is to be contrasted with its previously explicated logical function in judging, is clearly intended as anticipatory or provisional in nature.[48] In other words, we may take Kant to be arguing conditionally that *if* the understanding has a real or transcendental function, that is, if there is such a thing as a transcendental logic (something only to be established subsequently), then we are entitled to assume that its pure concepts or categories will correspond to the logical functions operative in the activity of judgment as analyzed in general logic. The nerve of this argument is contained in the crucial sixth paragraph, where Kant writes:

> The same function that gives unity to the different representations **in a judgment** also gives unity to the mere synthesis of different representations **in an intuition**, which, expressed generally, is called the pure concept of the understanding. The same understanding, therefore, and indeed by means of the very same actions through which it brings the logical form of a judgment into concepts by means of the analytical unity, also brings a transcendental content into its representations by means of the synthetic unity of the manifold in intuition in general, on account of which they are called pure concepts of the understanding that pertain to objects *a priori*; this can never be accomplished by universal logic. [A79 / B104–105]

Although the contrary has frequently been thought to be the case, the central claim of this paragraph is the identity of the understanding and its activity (function) as considered in general and in transcendental logic.[49] Thus, the first sentence speaks unambiguously of the "same function" producing unity in both judgment and intuition, and the second sentence refers to the "same understanding" as well as to the "same operations" thereof. We have already considered at some length the logical operation of the understanding and have seen that it involves the unification of representations under concepts. We have also seen that this unification takes place in certain determinate ways, which can be called "forms" or "functions" of unity. Once again, assuming that the understanding has a real as well as a logical use, what Kant is now claiming is that this

same unifying function also takes place at the level of intuition, thereby providing the representational content presupposed by the understanding in its logical activity.

One of the factors that has frequently misled commentators here is Kant's contrast between analytic and synthetic unity, which is sometimes taken as indicating that he is contrasting the activity of the understanding in forming analytic judgments, supposedly the concern of general logic, with its activity in synthetic judgments, which is the business of transcendental logic.[50] But such a reading is not warranted by the text. First, "analytic unity" refers to the concepts that are united in judgments. Nowhere does Kant maintain that judgments themselves are analytic unities.[51] Second, as we have already seen, concepts are analytic unities because they unite in a single representation a series of marks that pertain to a diversity of objects. In fact, it is precisely because concepts are such unities that they can be combined with one another in judgments, whereby "many possible cognitions are . . . drawn into one" (A69/B94). Once again, this holds true whether the judgment is analytic or synthetic. Third, by the "logical form of a judgment" Kant means a judgment of a given logical form. Thus, Kant's cryptic claim that by means of analytic unity the understanding "brings the logical form of a judgment into concepts" means simply that the understanding produces a judgment of a specific logical form by combining its concepts (analytic unities) in a determinate manner. Insofar as the understanding produces judgments, or judges, it also produces the forms of judgment.[52] The table of logical functions supposedly contains the complete specification of these forms.

Kant further contends that the "same understanding" also "introduces a transcendental content into its representations by means of the synthetic unity of the manifold in intuition in general." The expression "transcendental content" is obscure and subject to a variety of interpretations. Nevertheless, the most plausible is to take it as referring to the just-mentioned synthetic unity of the manifold.[53] This is so even though the text states that the transcendental content is introduced *by means of* the synthetic unity, not that it *is* this unity. Strictly speaking, a transcendental content is an extra-logical, objective content, that is, one that involves relation to an object. The key point here, which Kant only develops in the Transcendental Deduction, is that the synthetic unity of the manifold brought about by the categories is the form of the thought of an object in general. Consequently, insofar as the understanding produces such a synthetic unity, it also relates its representations to an object, thereby introducing a transcendental content. Since the determination of this

synthetic unity is isomorphic with the discursive act of judgment, this enables Kant to talk about the "same operations" or, more generally, to present a picture of the understanding as engaged in one fundamental activity of unification occurring at two levels. Finally, the reference to "intuition in general" is intended to indicate that this general transcendental or objectifying function of the understanding is independent of the particular nature of the manifold of intuition.

Assuming, then, that the understanding has such a function, and that it exercises it through the same operations through which it judges, it follows that the logical functions of judgment, which are the forms in accordance with which the understanding unites its concepts in judgment, will also be the forms in accordance with which it unites the manifold of intuition in order to determine an object for judgment. In short, the pure concepts of the understanding, which introduce the requisite transcendental content, are nothing other than the logical functions of judgment, viewed in connection with the manifold of intuition. Moreover, this allows Kant to conclude in the final step of the Metaphysical Deduction,

> In such a way there arise exactly as many pure concepts of the understanding, which apply to objects of intuition in general *a priori*, as there were logical functions of all possible judgments in the previous table: for the understanding is completely exhausted and its capacity entirely measured by these functions. Following Aristotle we will call these concepts **categories**, for our aim is basically identical with his although very distant from it in execution. [A79–80 / B105]

This "deduction" turns on the quasi-identification of the logical functions and the pure concepts. Rather than constituting two distinct sets of concepts—one pertaining to judgment, the other to sensible intuition—that must somehow be brought together, there is a single set of functions belonging to a single understanding operating at two levels. Although Kant does not express himself in precisely this way in the first edition of the *Critique*, he does so often enough elsewhere to remove any doubts that this is his view. For example, in the B-Deduction he writes: "But now the categories are nothing other than these very functions for judging, insofar as the manifold of a given intuition is determined with regard to them" (B143).[54]

This claim, which is central to the understanding of both the Metaphysical and Transcendental Deductions, underscores the significance of the logical functions in Kant's account of cognition, which is just what we would expect, given the discursivity thesis and the status of these functions as fundamental

forms of discursive thought. It also confirms the analysis offered in the second part of this chapter, according to which the logical functions, regarded as forms of conceptualization embedded in the various judgment forms, are characterized as "precategoreal." As we can now see more clearly, they are such because they express at the level of judgment the same function of thought that the category expresses at the level of intuition. This is precisely what makes them indispensable as "clues" to the discovery of the latter. Contrary to the view of Strawson, Guyer, and other critics of the Metaphysical Deduction, it is not that we need the category in order to be able to judge under a certain form; it is rather that we can be in possession of a given category only because we are capable of judging under the corresponding form.

Nevertheless, it is equally important to keep in mind the distinction between the logical functions and the categories, which is why their relation has been characterized as one of quasi-identity. The distinction is, however, functional rather than substantive. As Kant makes clear, the categories are to be equated not simply with the logical functions but with these functions qua operating at the level of intuition and introducing a "transcendental content" into the manifold of intuition. Thus, a reference to sensible intuition (though not a particular type thereof) is an essential component of the very concept of a category for Kant, whereas it is completely alien to the concept of a logical function. This reference to sensible intuition will eventually lead to the need to find schemata in our sensible intuition for these categories. But a prior and more basic problem is the previously noted need to show that the forms of discursive thought, which find their judgmental expression in the logical functions, also have an objectivating role to play in connection with sensible intuition. This is the task of the Transcendental Deduction to which we now turn.

marks that "its duration is not a time" (B149), which suggests that he might not rule out noumenal analogs to our sensible forms.

75. Although he does not emphasize the latter point, this is basically the objection raised against the version of my response to the problem offered in the first edition of this book by Falkenstein, "Kant's Argument for the Non-Spatiotemporality of Things in Themselves," *Kant-Studien* 80 (1989), pp. 265–83. Fortunately, as we are about to see, he also suggests the response to this objection, which I gratefully adopt as a more or less friendly amendment, even though he himself apparently does not see it in quite this way. For my initial use of Falkenstein's analysis, see *Idealism and Freedom*, pp. 10–11.
76. Falkenstein, "Kant's Argument," esp. pp. 275–82; *Kant's Intuitionism*, pp. 301–04.
77. Falkenstein, *Kant's Intuitionism*, p. 305. For Falkenstein's rejection of the idealistic implication see "Kant's Argument," pp. 382–83. It must also be kept in mind that a sharp distinction between Kant's arguments in the Aesthetic and transcendental idealism is a central theme of *Kant's Intuitionism*. In other words, Falkenstein advocates a version of the separability thesis.
78. Falkenstein, "Kant's Argument," p. 282.
79. Ibid., p. 305. As his note 23 on p. 428 indicates, Falkenstein's worry about the issue of non-spatiality being treated as a matter of definition seems directed at my own earlier analysis of the issue.

CHAPTER 6

1. Since Kant himself never explicitly tells us, there is some dispute regarding the precise location of the Metaphysical Deduction. In particular, it is often thought to be contained entirely in §10, which is the third section of the "Clue." See, for example, Rolf P. Horstmann, "The Metaphysical Deduction in Kant's Critique of Pure Reason," *Philosophical Forum* 13 (1981), pp. 32–47. On the reading advocated here, the entire "Clue" may be seen as a metaphysical deduction in a broad sense, since it provides the analysis of judgment and its functions that is essential for the determination of the categories. Nevertheless, §10 will here be taken as the "metaphysical deduction proper," since it is here that Kant argues for the correspondence between the functions of judgment and the categories.
2. This criticism, which has been reiterated countless times, was sharply expressed by Hegel. For a discussion of this see, Reich, *The Completeness of Kant's Table of Judgments*, pp. 1–2.
3. Strawson, *The Bounds of Sense*, pp. 81–82.
4. These include Brandt, *The Table of Judgments: Critique of Pure Reason A 67–76; B 92–101*, trans. by Eric Watkins, Wolff, *Die Vollständigkeit der kantischen Urteilstafel*; and Longuenesse, *Kant and the Capacity to Judge*. All these authors are responding to Klaus Reich's pioneering, yet exceedingly controversial, treatment of the topic (see note 2).
5. This is argued by L. Krüger, "Wollte Kant die Vollständigkeit seiner Urteilstafel beweisen?" *Kant-Studien* 59 (1968), pp. 333–55. In the first edition of this work I was in basic agreement with Krüger's position.
6. See Pro 4: 318; 111, and Kant's letter to Marcus Herz of May 26, 1789, B11: 51; 313–14.

7. This point is emphasized by Wolff (*Die Vollständigkeit,* p. 180), who criticizes Krüger. (See note 5).
8. On this point I am, again, in agreement with Wolff; though I question his suggestion that the discursivity that is here "dogmatically" assumed is somehow vindicated in the Transcendental Deduction (see *Vollständigkeit,* pp. 177 and 181). I shall return to this issue in chapter 7.
9. See, for example, Axiv, Bxxii, A80–81 / B106–07, and Pro 4: 322–24; 114–16.
10. On the terminological issue, see Wolff, *Die Vollständigkeit,* p. 85, n. 84.
11. This important point is emphasized by both Wolff, *Die Vollständigkeit,* pp. 85–86, and by Brandt, *The Table of Judgments,* pp. 64–65.
12. This point is emphasized by Wolff, *Die Vollständigkeit,* pp. 40–41.
13. What follows is essentially my distillation of the analyses provided by Brandt, Wolff, and Longuenesse. Although much of the terminology and to some extent the way of framing the issue is my own, I am greatly indebted to their work on virtually every significant point.
14. On the peculiarity of modality as a function type, see Brandt, *The Table of Judgments,* pp. 6, 62–63; Wolff, *Die Vollständigkeit,* pp. 124–29; and Longuenesse, "The Divisions of Transcendental Logic and the Leading Thread," p. 147.
15. As Wolff puts it, for Kant modality as a logical form of judgment is always *de dicto* (*Die Vollständigkeit,* p. 126). This does not mean that Kant rejects all *de re* modality, merely that it has no place in an analysis of judgment from the standpoint of general logic.
16. Kneale, *The Development of Logic,* pp. 355–56.
17. See Brandt, *The Table of Judgments,* esp. pp. 72–84.
18. See Wolff, *Die Vollständigkeit,* p. 161, for the critique of Brandt. It should also be kept in mind, however, that both Brandt and Wolff are responding to Klaus Reich's treatment of the issue (*The Completeness of Kant's Table of Judgments,* esp. pp. 101–09).
19. Typical here is the reaction of Kemp Smith, *Commentary,* p. 192.
20. The functions of affirmative and negative judgments according to Kant are, respectively, to extend knowledge and ward off error (See A709 / B737). This limitative function turns out to be of particular importance in Kant's analysis of complete determination or individuation treated in "The Ideal of Pure Reason," esp. A571–80 / B579–608.
21. The problem is complicated by the fact that the introduction of "relation" as a title was an innovation on Kant's part, replacing the standard division between simple and complex judgments, where the latter would include, in addition to hypothetical and disjunctive judgments, also copulative judgments and perhaps other forms as well. On this point see Kemp Smith (*Commentary,* pp. 192–93), who predictably asserts that Kant's omission of this form is further evidence of the illicit nature of his procedure in selecting only judgment forms that will yield the desired categories.
22. The parenthetical additions are my emendations of Kant's characterization, but they seem to be required by the conception of a copulative judgment.
23. They are discussed by Georg Friedrich Meier, *Auszug aus der Vernunftlehre,* §304, which Kant used as the textbook for his logic lectures. Meier's text is reprinted in KGS, vol. 16, which contains Kant's *Reflexionen* dealing with logic.
24. See also R3111 16: 663.

25. This again points to the gulf separating Kant's analysis of judgment from the truth-functional approach of contemporary logic, where conjunction plays a significant role precisely because the elements linked by logical connectives have independent truth values.
26. The point is raised by Kemp Smith, *Commentary*, pp. 193–94.
27. Although I take a somewhat different and more direct approach, my analysis of this note is heavily indebted to Wolff's detailed and systematic discussion. See *Die Vollstandigkeit*, pp. 16–74.
28. Kant reiterates this point in a letter to J. S. Beck, who had suggested that *all* synthetic divisions must be trichotomous. See Br 11: 394; 445.
29. In R3030 16: 622–23 and R5854 18: 369–70, Kant connects trichotomous divisions with the unity of consciousness.
30. I am here following Wolff, *Die Vollständigkeit*, pp. 172–73.
31. Longuenesse, *Kant and the Capacity to Judge*, p. 5.
32. Ibid., pp. 5–6.
33. Ibid., p. 5.
34. The issue of psychologism is noted by Longuenesse, *Kant and the Capacity to Judge*, pp. 6–7.
35. Strawson, *The Bounds of Sense*, p. 32.
36. A prime example of this approach is Kitcher, *Kant's Transcendental Psychology*. For my critique of Kitcher, see *Idealism and Freedom*, pp. 53–66.
37. Longuenesse, "The Divisions of the Transcendental Logic and the Leading Thread," p. 143, and *Kant and the Capacity Judge*, pp. 3–6 and passim.
38. Insofar as Kant understands a function as a unifying rule, he is clearly construing the term in its mathematical sense as the law underlying an operation. (This sense of the term is emphasized by Reich, *The Completeness of Kant's Table of Judgments*, p. 27.) As we have already seen, however, Kant usually understands the term in the Aristotelian or physiological sense.
39. In a first-edition passage, which is also contained in the second, Kant defines this concept as the relation of subsistence and inherence (A80 / B106). Both of these definitions are merely nominal, however, since Kant denies the possibility of a real definition of any of the pure concepts. On this latter point, see A240–41 / B300–01.
40. This is emphasized by Bennett, *Kant's Analytic*, p. 183.
41. As we shall see in chapter 12, Kant explores the illicit projection of the ontological concept of substance in connection with the soul or self in the Paralogisms.
42. This is pointed out by Melnick in *Kant's Analogies*, p. 39.
43. Melnick (*Kant's Analogies*, p. 51), suggests the appropriateness of the Rylean notion in this context.
44. Guyer, *Kant and the Claims of Knowledge*, p. 99. In the continuation of the same sentence he makes a similar point about the connection between disjunctive judgments and interaction.
45. The issue is discussed in detail in connection with the Third Analogy by Longuenesse, *Kant and the Capacity to Judge*, pp. 375–87.
46. This goes back at least to the contrast drawn in the Inaugural Dissertation between the logical and the real use of the intellect (*intellectus*), where Kant denied that the intellect

has a real use in connection with sensible cognition (Diss 2: 394; 386). In the *Critique,* where the main concern of the Transcendental Analytic may be described as demonstrating that the understanding has a real use, albeit one limited to possible experience, he does not use that expression. Nevertheless, the contrast between the logical and real uses of the understanding is certainly implicit in the entire account, since the first section of the "Clue" is given the heading: "On the logical use of the understanding in general" (A67 / B92). Moreover, in the Introduction to the Dialectic Kant distinguishes between the logical and the "pure" (real or metaphysical) use of reason in a way that suggests that the same distinction is applicable to the understanding (A303–09 / B359–66).

47. Following the suggestion of de Vleeschauwer and Ian Proops (in an unpublished paper), I have argued in *Kant's Theory of Taste* (pp. 67–84 and passim) that the Metaphysical and Transcendental Deductions are concerned, respectively, with the *quid facti* and the *quid juris.* Nothing in the present discussion, however, turns on this.
48. See Longuenesse, "The Divisions of the Transcendental Logic and the Leading Thread," p. 149.
49. In the older literature, this was emphasized by Reich and following him, Paton (*Kant's Metaphysic,* vol. 1, pp. 281–302).
50. See Kemp Smith, *Commentary,* pp. 178–80, and Wolff, *Kant's Theory of Mental Activity,* pp. 68–77.
51. See Reich, *The Completeness,* pp. 8–10.
52. See Paton, *Kant's Metaphysic,* vol. 1, p. 288.
53. Ibid., p. 290.
54. Listed in chronological order, see also: Pro 4: 324; 116, MAN 4: 474; 189 B128, and Fort 20: 272; 363.

CHAPTER 7

1. It is not, however, completely obscured. A case in point is the suggestion that the purpose of such a deduction is "to make comprehensible this relation of the understanding to sensibility and by means of the latter to all objects of experience" (A128).
2. J. Claude Evans has appropriately characterized this worry as the transcendental analogue to Descartes's specter of the evil genius ("Two-Steps-in-One-Proof: The Structure of the Transcendental Deduction of the Categories," *Journal of the History of Philosophy* 28 [1990], pp. 553–70). As Evans points out, however, it is important to keep in mind the differences between the two specters.
3. Henrich, "The Proof-Structure of Kant's Transcendental Deduction," in *Kant on Pure Reason,* ed. by Ralph C. S. Walker, pp. 67–68.
4. Ibid, p. 70.
5. See, for example, Raymond Brouillet, "Dieter Henrich et 'The Proof-Structure of Kant's Transcendental Deduction': Réflexions Critiques," *Dialogue* 14 (1975), pp. 639–48; Hans Wagner, "Der Argumentationsgang in Kants Deduktion der Kategorien," *Kant-Studien,* 71 (1980), pp. 352–66; and Hoke Robinson, "Intuition and Manifold in the Transcendental Deduction," *Southern Journal of Philosophy* 23 (1984), pp. 403–12.
6. Dieter Henrich, "Diskussion: Beweisstruktur der transzendentalen Deduktion," in *Prob-*