

Fichte's Logical Legacy:

Thetic Judgment from the *Wissenschaftslehre* to Brentano

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It is not usual to think of Fichte as a logician, nor indeed to think of him as leaving a legacy that shaped the subsequent history of symbolic logic. But I argue here that there is such a legacy, and that Fichte formulated an agenda in formal logic that his students (and their students in turn) used to spark a logical revolution. That revolution arguably reached its culmination in the logical writings of Franz Brentano, better known as a founding figure of the phenomenological movement. In logical writings that were published only posthumously, but that were fully elaborated in the decade prior to the publication of Frege's *Begriffsschrift*, Brentano (together with his collaborator Anton Marty) developed a radically innovative logical calculus that was explicitly designed to overthrow the orthodox logical analysis of judgment and inference. At the center of this revolution was the notion of thetic judgment [*thetische Urteil*], a form of judgment upon which Fichte had insisted in the first published version of the *Wissenschaftslehre*, and which his students subsequently set out to accommodate within the framework provided by Kant's general logic. But thetic judgment proved resistant to such assimilation, and it was left to Brentano to use the analysis of thetic judgment in his attempt to topple a long-standing logical tradition.

In what follows I reconstruct the main episodes in this century-long drama in the logical theory of judgment. My discussion is divided into four sections. I begin with a review of Fichte's most explicit call for logical revolution, together with his introduction of the notion of thetic judgment, set against the backdrop of an anomaly

within Kant's logical commitments. In the second section I trace the logical treatment of this anomaly among Fichte's philosophical progeny, in particular Johann Friedrich Herbart and Moritz Drobisch. The third section explores Brentano's position, and his more radical solution to the anomaly bequeathed by Kant. In the final section I return to Fichte, to consider to what degree these subsequent developments remained faithful to the logical agenda Fichte had projected.

§1 Fichte's Call to Logical Revolution

Logical concerns play a role in many of Fichte's writings. From his first prospectus for the yet-to-be-written *Wissenschaftslehre*, through to some of his final lecture courses, Fichte again and again returns to logical questions. One of the continuing themes of these logical remarks concerns the proper relation between logic on the one hand and transcendental philosophy (or simply *Wissenschaftslehre*) on the other. In the *Critique of Pure Reason*, Kant had famously proposed to use logical theory – and in particular the logical treatment of judgment – as a guide to his investigation of the structures and limits of knowledge. But from the beginning, Fichte proposed a different schema. Logical theory, he boldly pronounced in his essay “On the Concept of the *Wissenschaftslehre*” must *follow* from the *Wissenschaftslehre*, being built upon or even derived from the transcendental investigation of knowledge and objective representation.

The special relationship between logic and the *Wissenschaftslehre* follows from the above. The former does not *provide the foundation* for the latter; it is, instead, the latter which provides the foundation for the former. (SW I, 68)

This is a paradoxical agenda to be sure, as Fichte himself recognized. For it suggests that one must *derive* logical theory from some other body of doctrine.¹ Yet surely

any such derivation would itself have to presuppose some principles of proof – i.e., a logic.

In a number of subsequent writings we find Fichte struggling with this paradox, to which I shall return in due course. But one thing is clear. To follow such a path is to undertake a rather direct reversal of the path of investigation followed in *The Critique of Pure Reason*. No longer can logical theory be taken for granted as a fixed and completed body of doctrine upon which we might rely in the transcendental investigation of the conditions of knowledge and the forms of subjectivity. For Fichte, the results of logic must remain provisional in advance of transcendental inquiry, awaiting vindication by the results of the “science of science” – i.e., *Wissenschaftslehre*. Fichte explicitly endorses this result in the earliest writings, but it was some time before its full revolutionary potential came into view. Is it possible that the logic receiving its warrant from the *Wissenschaftslehre* might diverge from logical orthodoxy? Fichte himself certainly recognized this revolutionary possibility; indeed he insisted upon it -- most explicitly in a lecture course he delivered twice in the last stages of his life. In the course advertised under the title *Transcendental Logic*, he criticized Kant for his uncritical reliance on logical theory, and called for a logical revolution to be carried out in Kant’s name.

He [Kant] was not so disinclined as he ought to have been toward common logic, and did not destroy it from the ground up as his philosophy truly required, and as we here undertake to do in his name. (SW IX, 111-112)

To carry through the spirit of Kant’s project, and to make good on his own early promise not to take logic for granted, Fichte here insists that logical theory must be thoroughly reconstructed in the light of the new accounts of knowledge and subjectivity inaugurated by Kant’s critical investigations.

What might such a reconstruction look like? What kind of logic would proceed from and reflect the approach to knowledge developed by Kant and Fichte? This is by no means a simple question, and I shall not here propose anything like a complete answer. In the late lecture course to which I have already referred, Fichte himself sketched out an agenda for this logical revolution, but it is not that agenda that I seek analyze here.² I propose instead to focus on a logical revolution that unfolded only after Fichte's death, but which drew on a logical proposal Fichte had already advanced in the first part of the first published version of the *Wissenschaftslehre*.

As is well-known, the opening of the 1794-95 *Grundlage* (GWL) takes as its point of departure certain fundamental principles of logic. Fichte there attempts to guide his readers and students to the first principles of the *Wissenschaftslehre* by challenging them to reflect on the logical principles of identity and non-contradiction. But Fichte also insists that these opening moves are not themselves intended as *proofs* of the first principles of the *Wissenschaftslehre*, since the first principles of *all* knowledge clearly cannot themselves be derived from anything more basic. So much is well-known, and has been much discussed. But what is rather less often noted is that Fichte himself returns to logical concerns at the *end* of his opening moves in GWL. At this point the direction of reasoning has indeed been reversed, in accordance with the radical position Fichte had proposed in his prospectus. Fichte no longer seeks to draw transcendental principles from logical ones, but proposes instead a revision of logic based on the fundamental transcendental principles he has identified.

So much for the application of the foregoing to our system in general; but it has yet another and more important application to the form of judgments, which there are many reasons for not overlooking at this point. For, just as there were antithetic and

synthetic judgments, so there ought, by analogy, to be *thetic judgments also*, which should in some respect be directly opposed to them. (SW I, 115-116; emphasis added)

Fichte's proposal here is that the discovery of the first principles of the *Wissenschaftslehre* should itself lead us to recognize a new logical form of judgment: the thetic judgment.

Cataloging the various forms of judgment has long been a central part of logical theory. Just as the syllogistic figures specify the allowable forms of inference (the forms in accordance with which judgments must be combined in order to yield a valid proof) so the catalog of judgments specifies the allowable forms of judgment: the forms by which concepts can be combined to forge well-formed judgments of different logical types. In Kant's logic, the analysis of the forms of judgment is carried out with reference to the table of judgment forms. The table, which famously appears in the so-called "Metaphysical Deduction of the Categories" (A70/B95), provides a tool which can be used both to construct judgments and to exhibit their differential contributions to inference. Using the table, one analyzes a judgment by indicating one form from each of Kant's four trios. Hence "All men are mortal" (for example) is universal in quantity, affirmative in quality, categorical in relation, and assertoric in modality.

In order to appreciate the significance of Fichte's proposed revision, it is important to recognize that all the judgments catalogued within the framework of Kant's table require a minimum of two concepts. With the concepts "man" and "mortal" I can in principle form twenty-seven distinct affirmative judgments using the table; but with "mortality" alone I can form none. As we shall see, this constraint seems to have a deep source in Kant's approach to the logic of judgment. At least within the limits of general logic, Kant treats judgment in general as involving a

combination of representations; hence the very possibility of judgment depends on the availability of at least two representations that can be combined. Since the general logic of judgment deals only with general representations (i.e., not with intuitions), any judgment that is recognized in logic requires the synthesis [*Synthesis*] or combination [*Verbindung*] of at least two concepts. I shall refer to this as *Kant's synthetic construal of judgment*. The traces of the synthetic construal can be seen in some of Kant's very general characterizations of judgment,³ in the specific forms of judgment he recognizes,⁴ and in the formulation of his famous distinction between analytic and synthetic judgments.⁵ It is also a construal of judgment that shapes his approach to the operations of the understanding more generally.⁶

In introducing the notion of thetic judgment, Fichte is effectively proposing a revision to the Kantian typography of judgment forms. But in doing so he is also recognizably developing one of Kant's own most famous leads. The point of departure in this case, however, is not general logic, but Kant's treatment of a particular argument in metaphysics: the ontological proof for the existence of God. As is well known, Kant insisted in the *Critique* that the ontological argument is spurious, since it illicitly treats "existence" as a real predicate. On its face, this sounds like a claim about the logical form of existential judgments. But it is not an insight that easily finds a place within the parameters of Kant's general logical theory. If 'exists' (the '*ist*' in '*Gott ist*') is not a real predicate, then how should we analyze the logical form of a singular existential judgment?

Kant's writings contain a number of suggestions about how to answer this question, though none are properly integrated into his general logical theory of judgment.⁷ One such suggestion will be particularly important in what follows. In his

discussion of the ontological proof, Kant seeks to accommodate existential judgment by distinguishing between two forms of positing.

The proposition, 'God is omnipotent' contains two concepts, each of which has its object – God and omnipotence. The small word 'is' adds no new predicate, but only serves to posit the predicate *in its relation* to the subject. If, now, we take the subject (God) with all its predicates (among which is omnipotence), and say 'God is' or 'There is a God', we attach no new predicate to the concept of God, but only posit the subject in itself with all its predicates, and indeed posit it as being an *object* that stands in relation to my concept. (A598-9/B626-7)

At this point a terminological observation is perhaps in order. The German verb which is here translated as "posit" is of course "*setzen*" – to put or place. This in turn is the etymological equivalent of the Greek, "*thesis*," which is itself the root in "synthesis": to put or place together. Kant here proposes a distinction between two forms of judgment. Each is to be understood as a kind of positing or *thesis*, but the positing comes in two fundamentally different varieties. In relative positing I posit one representation *in relation to* another. In Kant's example, I posit the concept "God" in a certain relation to the concept "omnipotence." But in a judgment of existence I engage in a different sort of positing altogether. In effect I posit *God* (not the concept, but the divine being itself) as something which answers to my concept. In an early essay Kant had even called this second form of positing "absolute positing" – a phrase with obvious Fichteian resonances.⁸

We must resist the temptation to enter further here into the rich details of Kant's position. The crucial point for our purposes lies in the affinity between Kant's second, non-relative form of positing, and thethetic judgment-form Fichte identifies in the opening passages of the *Wissenschaftslehre*. Fichte provides various formulations of the principles that are meant to provide "the foundation of the entire

Wissenschaftslehre” (SW I, 91ff). Some are symbolic ($I = I$, $I \neq \sim I$); others discursive (*‘the I is posited absolutely’, ‘I am I’*). The first two principles – the principles of self-positing and counter-positing respectively – are meant to express constitutive acts (or *‘fact-acts’* – *Thathandlungen*) of subjectivity. But they have as their correlates a pair of proto-existential judgments: *‘I am’* and *‘It is.’* That is, the first act involves positing my own existence as a self-determining, self-enacting subject; in the second act I posit the existence of something else, some not-I, which limits and determines the I. For Fichte the twin acts of positing and counter-positing comprise the basic transcendental-dialectical framework for finite rational subjectivity. And in these two proto-existential judgments we find the underlying conditions for all particular acts of judgment.⁹ But in neither of these proto-judgments do we find a case of what Kant would call *‘relative positing.’* They do not involve the combination or synthesis of concepts, hence they find no natural place on Kant’s table of forms. So if the apparatus of general logic is to accommodate them, then the catalog of basic judgment forms must be revised.

Athetic judgment, ..., would be one in which something is asserted, not to be like anything else or opposed to anything else, but simply to be identical with itself

The first and foremost judgment of this type is *‘I am’*. (SW I, 116)

I shall return below (§4) to consider Fichte’s own elaboration of the status of such thetic judgments. But I turn first to consider the problems they created for the generations of logicians who undertook the requisite revision of general logic.

§ 2 Moritz Drobisch and the Logical Accommodation of Thetic Judgment¹⁰

The first decades of 19th century German logic are now mainly remembered as a period of Hegelian dominance and radical logical proposals: dialectical logic, material logic, the purported rejection of the principle of non-contradiction. But

alongside the Hegelian movement there persisted a logic that can best be described as *normal* by comparison. I use ‘normal’ here in a sense borrowed from Thomas Kuhn.¹¹ In mid-19th century Germany there was, in Kuhn’s sense, a ‘normal science’ of logic, explicitly relying on a paradigm provided by Kant. Kant’s logic provided a canonical accomplishment, a standard textbook for training practitioners, and a working apparatus for the logical analysis of judgments and inferences. At the same time it generated problems of normal science requiring solutions, with standards of success and failure established by the logical practice itself. In the phenomenon of singular existential judgment it encountered an anomaly to be resolved. So here is our question: how did the normal working logicians of the 19th century manage the apparent anomaly of singular existential judgment? How did a logic designed to handle judgments of the form ‘S is P’ handle judgments whose grammatical form is ‘I am’ or ‘it is’? There are many voices in the history of this logical unrest; in what follows I focus my attention on two logicians in particular: Moritz Wm. Drobisch and Franz Brentano -- a heroic logical normal and a logical subversive.

Moritz Drobisch (1802-1896) was, in effect, Fichte’s logical grandson, by way of Johann Friedrich Herbart (1776-1841) -- the founder and namesake of the ‘Herbartian School’ of logic. Herbart had studied with Fichte at Jena, and although he very prominently broke with Fichtean idealism, he nonetheless took up Fichte’s call to logical revolution together with his notion ofthetic judgment. At the heart of Herbartian logic was the claim that categorical judgments lack existential import. To say that Cyclops are one-eyed, for instance, or that square circles are impossible, is certainly not to assert the existence of Cyclops or square circles.¹² An existence claim, Herbart proposes, must accordingly be recognized as an independent, non-

categorical judgmental form. In these judgments, Herbart claims, there is only a predicate, introduced ‘without limit or condition.’

Everything changes in the representation of these judgments, where there is no subject for the predicate. There arises in this way an *existential proposition*, which one misinterprets if one treats the concept of being as the original predicate. (Herbart 1813, 111; emphasis added)

Among traditional logicians, Herbart complains, these judgments have been neglected, even though they are well-represented in ordinary language and play a fundamental logical role. He goes on to introduce a set of examples which would receive considerable attention over the subsequent decades of German logic: *es friert, es regnet, es blitzt, es donnert* (it is freezing, it is raining, there is lightening, it is thundering). And he introduces new terminology to cover these judgments. They are, he claims, ‘existential propositions’ [*Existentialsätze*] or ‘thetic judgments’ [*thetische Urtheile*]. Their root form is not ‘S is P’ but rather ‘it is P’ or ‘there is P’ [*Es ist P*], where ‘it’ (*es*) functions not as a subject-concept but only to mark the empty place of the subject position.

Among the logicians of the Herbartian school, it became standard to credit Herbart with having “discovered existential propositions.”¹³ In retrospect we can see that he was introducing logical terminology to acknowledge a form of judgment upon which Kant had relied and Fichte had insisted. But it is one thing to name a new judgment form; it is quite another to integrate it into logical theory and a working inferential system. In Herbart’s logic, existential judgments were quite literally tacked on as a final section in the logic of judgment, following a faithful replication of Kant’s synthetic treatment in accordance with the table of forms. The task of integrating this addition was taken up in detail by Herbart’s student and disciple, Moritz Drobisch. The chief work here is Drobisch’s *Neue Darstellung der Logik*

nach ihren einfachsten Verhältnissen, which first appeared in 1836 and then in many subsequent editions over the course of half a century. The work falls squarely within the Kantian-Herbartian tradition, in its definitions and organization, in its many explicit references to Kant's logical apparatus and in its frequent claims to be following Herbart's innovations.¹⁴ It is historically significant in part for its attempt to apply logic in mathematics (a Mathematical Appendix constructs mathematical proofs using Drobisch's logical apparatus), but for us its significance lies in its attempt to provide a Kantian logic that can systematically incorporate the thetic judgments that Fichte had proposed. In the changes made to the successive editions of Drobisch's text one finds a record of a crisis underway in Kantian logic.

Drobisch's central logical innovation lies in his distinction between two broad classes of judgment, which he dubs '*Beschaffenheitsurteile*' and '*Beziehungsurteile*.' These are difficult terms to translate, but for reasons that will become clear I render them as '*attributive judgments*' and '*referential judgments*' respectively. The distinction is incipient in the first edition of Drobisch's *Logic* (1836) but emerges fully in the second edition (1851), which Drobisch himself describes as 'a completely rewritten work, almost a new book.' My discussion follows Drobisch's third edition (1863), by which time the distinction had quite thoroughly reshaped his logical treatment of judgment.

Drobisch's point of departure is the Herbartian analysis of categorical propositions, which he treats as non-existential and intrinsically hypothetical in form.

The judgments, 'God is just,' or 'the soul is not transitory,' no more include the claims that a God exists, or that there are souls than 'the Cyclops are one-eyed,' 'the Furies have snakes for hair,' or 'Ghosts appear at night' unconditionally posit the subjects: Cyclops, Furies, Ghosts. Rather, all these judgments say only that *if* one posits the subject then the predicate applies as a determination of its features

[*Beschaffenheiten*]. ... This important point was first recognized by Herbart.

(Drobisch 1863, 59-60.)

For Drobisch, an attributive judgment [*Beschaffenheitsurteil*] expresses a relation among concepts, specifying either its genus or some among its species, or attributing some property to its instances. But an attributive judgment does not take a stand on whether or not those concepts are instantiated. Because attributive judgments express a relation, they require a minimum of two concepts to serve as the relata.

Symbolically, they are represented as 'S is P' or 'SxP', where S and P are concepts and x is a form of relation. Such judgments cannot be used to express an existential claim, insofar as the existence of an S is always implicit as an undischarged antecedent in a conditional. 'Cyclops are one-eyed' becomes 'If there is a Cyclops then it is one-eyed.' 'The soul is not transitory' becomes 'If there is a soul then it undergoes no change.' Generally: 'If S is, then S is P.' Existence cannot be treated as a predicate in an attributive judgment, for to do so would yield a tautology: 'If there is a Cyclops then it exists.'

How then is a judgment of existence to be formulated? Drobisch provides his answer in his treatment of referential judgments (*Beziehungsurteile*):

The simple answer is: through condition-less judgments, that is, those in which the conditioning subject term is ... absent altogether or in which there is only an empty place for one. ... [T]here results the form of judgment:

There is P [*es ist P*],

where the small word '*es*' ('it' or 'there') indicates the empty subject position. We can call such judgments 'thetic' or 'absolute'. (Drobisch 1863, 60)

For Drobisch, 'S is P' and "There is p' become the root forms for two broad families of judgment. We use attributive judgments to express relations among our concepts; we use referential judgments when existence is expressed. In each case the root form

can be inflected and modified to express a whole range of more complex judgments.

Drobisch's treatment concludes with a memorable catalog of thetic forms:

Examples: There is lightening; it is raining, there is fire; there are forebodings; there is a God; there is no devil, there are no witches, and so on; there are religious, irreligious and agnostic men; there are neither fairies nor elves nor goblins; there is either providence or fate; it is true, that everything good is beautiful; it is not true that if virtue is not rewarded then all morality is an empty illusion. (Drobisch 1863, 61)

'These thetic judgments' Drobisch insists, 'have an independent meaning, and should not be treated as categorical judgments.'

Drobisch's distinction between attributive and referential judgments allows what Kant's own logic did not: the formal recognition of judgments involving only a single concept. Drobisch integrates such judgments into logic essentially following Kant's own approach. Thetic judgments vary in all the usual ways: in quantity, quality, modality and relation. And they are subject to a range of principles of combination, both for producing complex thetic judgments from simple ones, and for combining thetic judgments in mediate and immediate inferences. In effect, Drobisch normalizes the anomalous phenomenon. He shows how the apparently anomalous case of singular existential judgment can be integrated into a Kantian formal representation of judgment and apparatus of inference. The generations of students who were taught logic from Drobisch's textbook learned a logical practice which recognized singular existential judgment as a distinct logical form of judgment governed by its own set of inference rules.

There is however an important sense in which Drobisch's accommodation of thetic judgment remained incomplete. For although his logical practice recognized and made use of existential judgments as judgments of a single concept, his definitions and general characterizations of judgment tended systematically to leave

such judgments out of account, or even to exclude them. This is because, despite his expansion of logical forms, Drobisch perpetuates the traditional characterization of judgment in general as essentially involving the combination and division of conceptual representations. In his general introduction to the work he defines judgments as the combination and separation of concepts [*Die Verknüpfung und Trennung der Begriffe*]¹⁵ and at the opening of the division devoted to judgment, he requires of every judgment at minimum a subject, a predicate, and a copula.

Every judgment consists therefore of three elements: 1) the subject, the concept concerning which the assertion is issued; 2) the predicate, which includes that which is asserted about the subject; 3) the copula, the form of the assertion, which is either affirming or denying, and either ascribes the predicate to the subject or refuses it [*das Prädikat dem Subjekt entweder beilegt oder abspricht*].(Drobisch 1863, §40)

The result is a curious imbalance in Drobisch's work. His logical practice recognizes and deploys a form of judgment which is excluded by own definition of judgment and by his general requirements on a well-formed formula. The tension we found in the Kantian position has here been sharpened into a formal inconsistency in symbolic logic.

Drobisch himself recognized the problem, and the traces of his struggle with it can be found in the many additions [*Zusätze*] and changes made to the later editions. Some of the changes amount to a merely cosmetic qualification of the principles which generate the problems. For instance, all the editions include the requirement that a well-formed judgment include both a subject and a predicate, but between the second and third editions Drobisch drops the word 'immer' (always) from the sentence: 'das Urteil wird nämlich immer aus drei Stücken bestehen'¹⁶ In a *Zusatz* introduced in the second edition, he suggests that judgments of one term (for instance: 'Cannonfire!' or 'Fire Alarm!') can be treated as enthymatic (*enthymematisch*, 1851,

§46z), but he offers no suggestion about how the enthymeme is to be filled out in accordance with the form specified by his definition and formal requirements. In a note included from the third edition on he finally acknowledges the difficulty of providing a unified definition of judgment applying to the full range of forms he relies on: “It is not easy to provide a simpler explanation of judgment than the one given here. It always comes out dualistically, if it aims to be clear” [*Es fällt immer dualistisch aus ...*] (Drobisch 1863, §40z). In short: In Drobisch’s logical system, judgment seems at root to be two different things. In some judgments I sort and combine my representations; in others I say that something beyond my representations exists. Drobisch himself ultimately despairs of uniting these two forms in a single non-disjunctive definition.

In sum, Drobisch sought to resolve an anomaly in Kantian logic, by showing how the paradigmatic logical characterization of judgment could accommodate thethetic judgments upon which Fichte and Herbart had insisted. But the strategy Drobisch used was insufficiently radical. The logical accommodation ultimately failed, because it attempted to graft a form of judgment onto a core theory that tends systematically to exclude it. If judgment is essentially the combination of representational content then it cannot ultimately accommodate judgments that do not at root involve the combination of representations. It would fall to a more radical generation of logicians to make a more fundamental break.

§3 Brentano’s Thetic Logic

Franz Brentano is now best remembered as a founding figure of modern phenomenology, the one who vigorously introduced the problems of intentionality into the study of conscious experience, and appealed to ‘intentional inexistence’ to

analyze its structure. Solving the problems bequeathed by Brentano's work became one of the organizing strategies not only among his many influential students (Husserl, Meinong, Twardowski, Marty) but also among philosophers of mind a century later (Chisholm, Dennett, Quine, Dretske, Fodor, Searle, McGinn ...). But our interest here is rather in Brentano's work as a logician. Brentano's logical doctrines have not been widely discussed, and the neglect is in retrospect explicable.¹⁷ His most detailed logical writings were published only posthumously in 1956, and his influence and accomplishment in this area, though significant, were doubly eclipsed: first by his role in the emergence of a distinctively phenomenological school, and then by the broader logical revolution to which Brentano had contributed but which ultimately over-swept him. (Brentano's main logical doctrines were first set out in 1874, and his calculus was elaborated in detail by 1877; Frege's *Begriffsschrift* was published in 1879.) Nonetheless, Brentano's logical accomplishments merit our attention. Why? Because in Brentano's logic the dispute over the logical representation of thetic judgments turns subversive, directly challenging the longstanding characterization of judgment as synthesis. Brentano and his collaborators formulated the first modern system of inference that systematically eschewed any appeal to judgment as a synthesis of representational content.

Brentano's most celebrated work is his *Psychology from an Empirical Standpoint*, first published in 1874. The seventh chapter touches directly on logical topics, and Brentano already there stated the main elements of his logical treatment of judgment: he rejects the synthetic construal of judgment; he insists that all judgments are essentially thetic in form; and he provides (in overview) the formal argument required to establish these conclusions in detail. In order to see these logical positions fully elaborated, however, we must work from Brentano's posthumously published

logic lectures from the 1870s (Brentano 1870-77), and from the work of Brentano's collaborators, particularly Franz Hillebrand and Anton Marty,¹⁸ who worked closely with Brentano in the construction and elaboration of the new logical framework he had established.

In the logic lectures, the first glimpse of Brentano's revolution is symbolic. Where the tradition had identified 'S is P' or 'SxP' as the fundamental schema for judgment, Brentano proposes instead (A+) or (A-).

The most universal schema for assertion accordingly reads: 'A is' (A+) and 'A is not' (A-). ... This form of expression contains everything that belongs to a simple judgment: a name, which names the object of judgment [*das Beurteilte*], and a sign which indicates whether the object of judgment is to be acknowledged or denied [*anzuerkennen oder zu verwerfen sei*]. (Brentano 1870-77, 98)

For Brentano, the fundamental elements of a judgment are not a subject and predicate in synthesis but rather a name (A), together with an indication of affirmation (+) or negation (-). It is hard to overestimate the significance of this rupture in a tradition which had long followed Kant and Aristotle in defining judgment in terms of synthesis.

Brentano acknowledges straightaway that his approach marks a break from that tradition, and that he owes us some principled grounds for rejecting the longstanding logical precedent.

This means a break with the traditional doctrine that every proposition consists of subject and predicate, and that the fundamental form (*Urform*) of judgment is 'A is (or is not) B'. One cannot repudiate so old a tradition unless one provides the grounds for one's divergence from it. (Brentano 1870-77, 98)

This opens a forthright and explicit attack (prior to Frege's or Russell's) on the subject-predicate analysis of judgment -- a logical position that he rather dramatically describes as '*die Hauptfehler*' of traditional logic: 'They [traditional logicians]

remained of the false opinion that judgment is essentially a combination of representations.’ (Brentano 1870-77, 125).

Brentano states his case against the synthetic construal of judgment in section 75 of his logic lectures, and his argument draws on several lines of argument we have excavated. He credits John Stuart Mill with the recognition that synthesis is not sufficient for judgment, although as we have seen the point can be traced at least to Hume.¹⁹ In simply entertaining a compound concept (‘a golden mountain’) or in posing a question (‘Was Mohammed a prophet of God?’) we find the combination of concepts without judgment; hence synthesis cannot by itself suffice for judgment.

We have seen that a combination of representations can take place without a judgment being given. J. St. Mill ... already remarked that if I say ‘golden mountain’, this is a combination of representations [*Verbindung von Vorstellungen*], but nonetheless not a judgment. ... Mill also showed that, whether I now believe or deny that Mohammed was a prophet of God, I must combine the two concepts ‘prophet of God’ and ‘Mohammed’ with one another. (Brentano 1870-77, 98-99)

Recognizing this, one might then set out to discover what *in addition to synthesis* is required for judgment -- whether by seeking out a particular form of synthesis (as in Kant) or by seeking some additional element present in judgmental synthesis (as in the appeal to the representation of ‘objective validity’ -- a position Brentano associates with Mill). Brentano cites Mill’s memorable remark: “To determine what it is that happens in the case of assent or dissent *besides putting two ideas together*, is one of the most intricate of metaphysical problems.”²⁰ But Brentano argues that such an approach is ‘wholly misguided’ [*vollkommen mislungen*]. This is because synthesis is not only insufficient for judgment; it is not necessary either. His argument on this point invokes the by-now celebrated examples:

Not only does the combination of representations not suffice to bring about a judgment, it is often not even necessary. This can be seen from the so-called existential propositions: *es regnet, es donnert, es gibt ein Gott* (it is raining, it is thundering, there is a God). (Brentano 1870-77, 99)

At least in the case of elementary judgments, Brentano argues, ‘the multiplicity of elements [*Mehrgliedrigkeit*] is in no way a necessary property of judgment’ (Brentano 1870-77, 101). Brentano accordingly draws his revolutionary conclusion: since the combination of representations is neither necessary nor sufficient for judgment, we ought to abandon the tradition which defines judgment in terms of synthesis: “We have shown that the combination of subject and predicate and other similar connections are in no way part of the essence of judgment” (Brentano 1874, 222e).

In articulating and defending this argument, Brentano both draws on but also forthrightly criticizes the Kantian-Herbartian tradition we have been tracking. As with most German logicians of this period, his treatment of the forms of judgment is peppered with commentary on Kant’s table, and he credits Kant with recognition of the crucial point that existence is not a predicate, and with the treatment of existential judgment as positing. But Brentano ultimately describes the Kantian position as ‘an unclear and contradictory halfway measure,’ complaining that Kant ‘allowed himself to be misled into classifying existential judgments as synthetic [as opposed to analytic] propositions.’²¹ The problem is that Kant recognizes a form of judgment that requires no conceptual multiplicity, and yet at the same time applies the analytic-synthetic distinction, thereby presupposing a pair of concepts in judgmental synthesis.²² Brentano’s assessment of the Herbartian position is similarly mixed. He credits Herbart with the introduction ofthetic judgment, thereby putting an end to longstanding requirement of conceptual multiplicity in judgment, but he criticizes him for treating thetic judgment as a rudimentary form ‘alongside’ [*nebenher*] the

traditionally recognized categorical judgments.²³ For Brentano, such a position represents an insufficiently radical reform of the traditional approach: existential judgment is not to be treated simply as one form alongside others; it is much rather the basic form of all judgment.

This brings us to Brentano's second major innovation in the logical representation of judgment. For Brentano, the case of existential judgment is not simply a counterexample to the characterization of judgment as synthesis -- an outlier against a general pattern of synthetic judgment. Its place is much more central than that. Ultimately, he argues, existential judgment is the root form of all judgment: "The fundamental form of judgment [*die Urform des Urteils*] is thethetic or absolute" (Brentano 1870-7, xviii). The argument for this thesis extensive and intricate. Where Herbart had argued that categorical judgment must be supplemented by thethetic or existential judgment, Brentano argues that once thethetic judgment is introduced, the categorical forms of judgment are strictly dispensable -- reducible to complexes of thethetic judgments. Establishing this result in detail takes up much of the text of the logic lectures. The first stage of the argument is to show that all the judgment forms recognized in Kantian logic can be 'translated' [*übersetzt*] or 'reduced' [*zurückgeführt*] to affirmative or negative thethetic judgments or conjunctions thereof.²⁴ He then sets out to construct axioms of proof and inferential figures sufficient to capture all the traditionally recognized valid inferences, now making use of only thethetic premises and conclusions. In short, he undertakes to transpose Kantian logic into a strictly thethetic idiom.

The full details of this logical undertaking cannot be recounted here, but a few examples will provide a sense of the project. As we have seen, a basic judgment in Brentanian logic takes one of two forms: (A+) or (A-), either the affirmation or the

denial of the existence of A. ‘Pierre exists’ accordingly becomes (P+); ‘there are no goblins’ becomes (G-). The traditional categorical forms are then treated as what Brentano calls ‘double judgments’ (*Doppelurteile*).²⁵ Some care must be taken with this term. The ‘doubling’ involved in a Brentanian double judgment is neither conjunction nor predication. It is not formed by combining two simple existential judgments (A+ & B+), nor by combining two concepts in a predicative unity, but rather by compounding the name or concept in a simple existential judgment. Hence for instance ‘Some S is P’ becomes (SP+); ‘No S is P’ becomes (SP-).

The categorical proposition, ‘Some man is sick,’ means the same as the existential proposition, ‘A sick man exists,’ or ‘There is a sick man.’ The categorical proposition, ‘No stone is living’ means the same as the existential proposition, ‘A living stone does not exist,’ or ‘There is no living stone.’

Some of the principles of the Brentanian translations are at first surprising. Using lower case letters to designate the negation of a concept, he proposes that the universal affirmative form of categorical judgment be rendered as follows: (Sp-). In this way the canonical affirmative judgment comes out as a negative: ‘All S are P’ becomes in effect: ‘There are no non-P Ss,’ or ‘A non-P S does not exist.’

The results are sometimes cumbersome, and not always intuitive. Compare a classical inference with its Brentanian transposition:

<i>Classical</i>	<i>Brentanian</i>
Some S are P	SP+
All P are Q	Pq-
—————	—————
Some S are Q	SQ+

The validity of the transposed inference is certainly not as readily recognizable as that of the traditional schema, and this is not simply because of the familiarity of the traditional form. And matters get considerably worse when hypothetical and disjunctive syllogisms are involved, since every disjunctive or hypothetical premise must ultimately be recast as a sequence of negated existential conjunctions -- an anticipation of Wittgenstein's truth tables. Brentano grants that his formulations may at times be awkward [*schleppend und unbequem*; Brentano 1870-77, 123], and allows that we may choose to acknowledge the traditional forms for simplicity of expression. But he insists that his translations show those forms to be dispensable;thetic judgment suffices for all the recognized inferences of classical logic.

Brentano's logic was destined to be surpassed and overshadowed before it was even published in any detail, but it nonetheless marks a watershed in the history of logic. In appearance it is utterly unlike any logic that preceded it; it operated with judgmental and inferential forms that differed fundamentally from those of its predecessors; and it provided the first modern calculus of proof that entirely renounced the construal of judgment as synthesis. Though now largely forgotten, it was the culmination of a century of logical foment.

But was it successful? There are of course different measures for the success of an inferential system. Certainly the Brentanian proposals were not without their difficulties. One of the most heated debates concerned Brentano's treatment of universal affirmative categoricals as existential negatives -- the transposition of 'All men are mortal' into 'There are no immortal men.' This transposition raises particular difficulty in connection with the fictional contexts to which the Herbartian analysis had appealed. One of the basic inference rules in Brentanian logic is that a *simple* existential negative entails any corresponding *compound* existential negative:

(C-) entails both (CA-) and (Ca-). (If there are no honest men then there are neither tall ones nor short ones.)²⁶ But now consider Brentano's treatment of a universal affirmative concerning a fictional object. In the Brentanian framework, a judgment about a Centaur or a Cyclops must be rendered as either an existential affirmative or an existential negative. This seems straightforward in the case of a simple denial that Cyclops exist, but what are we to say of the judgment that, e.g., Cyclops are monocular? Under the principles of Brentanian transposition, this comes out as 'There are no non-monocular Cyclops' (Cm-). That may seem fine until we recognize that 'Cyclops are binocular' must accordingly be rendered: 'There are no non-binocular Cyclops' (Cb-). By the inference rule governing existential negatives, (C-) entails both (Cm-) and (Cb-). Accordingly 'Cyclops are n-eyed' is true for any number n.

A more fundamental problem concerns the principled limits on Brentano's revolutionary ambitions. Brentano's stated aim was to bring about a thoroughgoing revolution in logic -- 'a complete overthrow, and at the same time, a reconstruction of elementary logic' (Brentano 1874, 230). While there is a sense in which he accomplished this, his revolutionary impulse was in the end fundamentally limited by the basic strategy of proof and legitimation that he adopted. As we have seen, Brentano effectively produced his logic by systematically translating or transposing the classically recognized forms. Moreover, his standard of adequacy for his completed system was in large part driven by his aim of capturing all traditionally warranted valid inferences.²⁷ These strategies amount to a significant drag on his revolutionary impulse -- as if the would-be revolutionary council seeks to legitimate itself by appeal to the very government it denounces and overthrows.

Certainly if success is to be measured by influence then Brentano's logic can at best be deemed a limited success. There did briefly emerge in Vienna what we might well describe as new 'normal science' of logic, explicitly taking Brentano's logical proposals as its point of reference and repudiating essential elements of the Kantian paradigm. Brentano's own logic remain unpublished until long after his death, but Marty, Hillebrand, Kraus, Meinong and others elaborated his logical proposals and tackled some of the central problems that arose from them. Through the mediation of his student Twardowski, Brentano indirectly influenced important developments in 20th century Polish logic. For the most part, however, Brentano's influence in logic was limited to his immediate circle, and indeed the details of his logic were known only to those who attended his lectures in Vienna. The textbooks and problems of the new century would much rather take their orientation from the mathematical logics of Peano, Frege, and Russell.

§4 Conclusion: Thetic Judgment and the *Wissenschaftslehre*

In the history we have reviewed here we find traces of Fichte's legacy in symbolic logic. With Brentano's logical calculus we find a systematic representation of inference that can aptly be described as a destruction of common logic "from the ground up," starting from the logical representation of judgment. In both the destructive and the constructive dimensions of his logical project, Brentano relies on the possibility of thetic judgment forms. Although Brentano himself makes scant reference to Fichte, his logical writings are peppered with references to Fichte's student (Herbart) and 'grand-student' (Drobisch). And as we have seen here, his core logical proposal can be traced back to a logical innovation Fichte himself had proposed in the *Wissenschaftslehre*. But even if we allow that Brentano's logic owes

much to a logical tradition traceable to Fichte, it still makes sense to ask whether and to what extent these later logical developments remained true to the vision for logical reform that Fichte himself had projected. This is not a straightforward question to answer, in no small part because Fichte's own logical doctrines remain under-explored and poorly understood. By way of conclusion, however, I would like to indicate at least one crucial respect in which the logicians who took up Fichte's logical legacy came to depart from the notion of thetic judgment that Fichte himself had proposed.

Before tackling this issue directly, however, it will be useful to return to a paradox that we noted at the outset: the paradox in Fichte's demand that logic be deduced or derived from the *Wissenschaftslehre*. We have already considered the ways in which this program involved a reversal of Kant's own account of the relation between logic and transcendental philosophy, sowing the seed for a possible revolution in logic. But we have also had occasion to consider the apparent incoherence – or at least deep circularity – involved in such a demand. For how can one *derive* one theory from another without relying (either implicitly or explicitly) on some kind of logical standard or rules of inference? I shall not here propose a general resolution of this paradox, but it is worth taking note of at least one respect in which the history of thetic judgment might help us make sense of Fichte's paradoxical demand.

To see the crucial point here, it is important to distinguish among the characteristic tasks of logical theory. Traditionally, the central task of logical theory is to provide some kind of standard for validity in inference. The standard itself can take various forms – whether as a set of inference-rules or an accounting of canonically valid syllogistic figures, for instance. Secondly, a logical theory typically

advances a catalog of fundamental logical truths; classically these comprised the core principles of identity, non-contradiction, and excluded middle. (Depending on the ways in which a particular logical system is devised, these two aspects of logical theory may be reducible to one.) But alongside these familiar tasks of logical theory there is an additional component which operates largely in the background, but which is in certain respects more basic. A logical theory must provide an accounting of the *elements* of inferences, and in particular an account of their underlying logical form. In modern logical systems, this task of logical theory is characteristically carried out by specifying a set of constraints or construction-rules for a well-formed formula; in classical logic it involved cataloging forms of judgment.

Now it is commonly said of logical theory that it is in the end no more than an elaborate set of tautologies. Kant himself held that general logic was analytic, and that its fundamental principle was nothing more than the principle of non-contradiction. This may be true for that portion of logical theory which enumerates logical truths or catalogs the valid rules of inference. But it is deeply misleading as an account of the logician's task of specifying the possible logical forms of judgment or the requirements on a well-formed formula. If, in the context of the modern predicate calculus, we say that the simplest atomic proposition consists of a name and a predicate, we are effectively laying down a stipulation, a requirement of well-formedness for any string of symbols that will be recognized as a truth-evaluable unit in our calculus. Such stipulations are not themselves grounded in or warranted by the principle of non-contradiction. Firstly, there is no contradiction in stipulating some alternate standard of well-formedness. But more importantly, these stipulations function as a constraint on anything that can be considered party to a contradiction,

and in that sense operate prior to any explicit application of the standard of non-contradiction.

So what are these basic logical demands grounded in, if not the principle of non-contradiction? I don't believe that there is a simple answer to this question. Indeed I would propose that it is one of the tasks of the historian of logic to document and illuminate the complex ways in which those stipulations have changed over the course of two and a half millennia of logical theory. But *part of the answer* is surely that the logician's constraints on well-formed judgments or propositions are motivated and guided by the domains of theory which the logician seeks to model and assess. Probably the most familiar example of this sort of motivation is to be found in Russell's famous insistence on logical forms suited to express relations. This important change in the standard of well-formedness was motivated not by concerns internal to logic, much less by the need to avoid contradiction. Russell proposed a new set of construction rules for well-formed formulae because of his interest in a particular *application* of logic: its application in formulating and proving the truths of arithmetic. It was because arithmetic theory trafficked so heavily in relations that Russell sought a logical syntax suited to their representation.²⁸ In short: the kind of logic a man chooses depends on the kind of theory he sets out to reflect and articulate.

How does this apply to the case of Fichte's logical proposals? In 1794, Fichte took himself to be in possession of a radically novel and far-reaching *philosophical* theory: the *Wissenschaftslehre*. And just as Russell reconfigured the demands on a well-formed formula in response to his specific concern with arithmetic, so Fichte's logical concerns were driven by the need to accommodate the specific judgmental forms that figured in the *Wissenschaftslehre*. Here we find one non-paradoxical sense in which logic might indeed be derivative upon another body of doctrine. Before one

settles on a standard for well-formed formulae or on a catalog of judgmental forms, one needs to know something of the judgments that actually figure in the bodies of theory with which one is concerned. In this sense, then, one must indeed let the formulation of the target theory run out ahead of the development of logical theory, which will in turn answer to its particular needs. And this is just what we find in Fichte's logical proposal concerning thetic judgment. The synthetic construal of judgment may have been adequate to the tasks of traditional metaphysics, but the science of *Wissenschaftslehre* gave prominence to judgments that were distorted if pressed into the traditional logical forms. Accordingly, Fichte proposed to let logical theory follow in the wake of transcendental philosophy, specifically by letting the shape of his philosophical theory revise the traditional standards for logical form.

But if this allows us to accommodate at least one element of Fichte's paradoxical demand for a "derivation of logic," it also brings into view some of the distance that separates Fichte's original logical proposal from the logical tradition to which it gave rise. As we have seen, Fichte's first and fundamental example of a thetic judgment is 'I am.' Now for a logician who has come to accommodate thetic judgment forms, such a judgment can be treated a simple substitution instance of the basic existential judgment-form, '_____ is' (A+ in the Brentanian calculus). The blank here might just as well be filled by 'the I' or 'God' or 'Pierre' ... ; the logical form remains the same. This is of course just what we should expect from the characteristic methods of general logic: as Kant repeatedly insists, general logic abstracts from the matter or content of a judgment in order to attend only to its form. But if Fichte introduced the notion of thetic judgment in order to capture the distinctive logical form of 'I am' *as it figures in the Wissenschaftslehre*, then this sort of abstraction will inevitably miss its target. A thorough investigation of this matter

must be reserved for another occasion, but two observations should suffice to indicate the nature of the difficulty.

The first point to note is Fichte's insistence that the distinction between the form and content of knowledge cannot be applied in the usual way to the first principle of the *Wissenschaftslehre*. In this special case, he holds, form and content are inextricably intertwined. This is a point that figures prominently in BWL:

No proposition is possible without both content and form. There must be something about which one has knowledge, and there must also be something which one knows about this thing. It follows that the initial proposition of the entire *Wissenschaftslehre* must have both content and form. Since this proposition is supposed to be certain immediately and through itself, this can only mean that its content determines its form and its form determines its content. *This particular form can fit only this particular content, and this content can fit only this form.* (SW I, 49, emphasis added)

It is not my purpose here to propose an interpretation of this tantalizing but deeply puzzling argument of BWL. But if we take Fichte's conclusion seriously here, then it should be clear that to treat 'I am' simply as a substitution instance of A+ is *not* to represent the logical form of the first principle of the *Wissenschaftslehre*.

A second observation serves to reinforce the first. To this point we have only considered one of Fichte's examples of athetic judgment. But in the opening sections of GWL he in fact proposes three. 'I am' is the first of the three. Even in this case we now have reason to wonder whether this is properly interpreted as an existential judgment. But consider now the second and third examples: 'Man is free' and 'A is beautiful' (SW I, 116-117). Neither of *these* judgments would appear to be existential in form; yet Fichte treats both as thetic judgments. With this in mind it is worth recalling Drobish's catalog of thetic judgments (above, §2), which included not only examples like 'There is a God', 'There is no devil', and 'There is either

providence or fate’, but also ‘It is true, that everything good is beautiful.’ In the first three cases we seem to have existential judgments (affirmative, negative and disjunctive respectively), but the last example points to something quite different.

Limitations of space preclude a full discussion of this matter here, but in the oddity of these non-existentialthetic judgments I believe we find an important clue regarding the logical approach Fichte sought to draw from the results of the *Wissenschaftslehre*. In order to bring the issues into view, we can take our orientation from a contrast between two very general ways of thinking about the logical form of judgments. If we start from the traditional conception of a judgment as a combination or synthesis of representational content, then it will be natural to specify the logical form of a judgment by specifying the construction-rules one must follow in order to forge a unified judgment out of its constituent concepts. On this approach, it is compositional similarity that marks out discrete logical kinds. As we have seen, such an approach encounters an obstacle in judgments which arguably involve only a single concept, although in an important sense the approach persists in any specification of logical form by appeal to the rules for the construction of basic and compound formulae. An alternate strategy for thinking about logical form is to think rather about the inferential role of a judgment, or more narrowly, about the kind of argument or evidence that would be required in order to warrant it. We tend to think of this latter approach to logical form as a part of Frege’s distinctive contribution to the development of modern logic, but there is reason to suspect that it has a considerably longer history. Now it should be clear that in many cases these two approaches to logical form will converge. In the compositional form of a conjunction, for instance, we find a clear reflection of its inferential significance. But the two

conceptions of form are nonetheless discrete, and in particular cases may point toward very different strategies for logical analysis.

At this point it is worth attending to Fichte's account of the logical form of two non-thetic judgments: 'A bird is an animal' and 'A plant is not an animal'. (See SW I, 116.) In each of these cases we have a pair of concepts, but the logical form differs. Why? Fichte's answer is instructive: their difference, he claims, consists in the difference in their respective 'grounds of correctness' [*Grund der Richtigkeit*]. There is a fundamental difference, as he puts it, in "what must be exhibited if the judgment is to be warranted sound" [*welche ... aufgezeigt werden müssen, wenn das Urtheil bewiesen werden soll*]. The particular account Fichte gives of this difference is rather sketchy. Roughly, warrant for judgments of the first form requires that we indicate some "ground of relation" [*Beziehungsgrund*] between the subject and predicate concept; warrant in the latter case requires some "ground of difference" [*Unterscheidungsgrund*] between the two. But what matters for our purposes here are not the particulars of these accounts but rather the understanding of logical form which they betray. For Fichte, it seems, the logical form of a judgment may be reflected in its compositional structure, but its measure lies in the form of warrant it projects and demands.

Now already it should be clear that on this approach, a judgment of one concept must have a different logical form from the two examples just considered. The result is overdetermined. If an existential judgment involves only one concept then obviously it cannot be warranted by specifying either a *Beziehungsgrund* or an *Unterscheidungsgrund* between its constituent concepts. In this sense the distinctive compositional structure of existential judgments may indeed alert us to the need to recognize novel logical forms of judgment. Ultimately, however, it is not the number

of concepts that matters to Fichte, but rather the mode of proof that a judgment projects for itself. And it is here that we can indeed glimpse a principle of unity among Fichte's otherwise heterogeneous examples of thetic judgment. In terms of their compositional form, 'I am,' 'Man is free,' and 'A is beautiful' are quite disparate judgments. What unites them as thetic judgments, I suggest, is their distinctive inferential significance in the context of the *Wissenschaftslehre*. In particular, all three are such that *no possible inference* could suffice to warrant them, though they nonetheless make an unconditional demand upon our assent.

Obviously this is a suggestion that points well beyond the scope of the present paper. But I hope it suffices to indicate that the logical revolution Fichte required would have to go well beyond any mere tinkering with the table of judgment forms or the rules for a well-formed formula. The 19th century logicians who sought to accommodate thetic judgments retained a deep allegiance to a conception of logic which required abstraction from all content, and to a conception of logical form tightly linked to compositional structure. Accordingly their strategy for accommodating thetic judgments was to propose a set of construction-rules and inferential principles for modeling them. In doing so, they did indeed take a rather dramatic step away from the canonical treatment of judgment in general logic. But in the course of this normalization of thetic judgment, what was most radical about Fichte's proposal progressively slipped from view.

Notes:

¹ “[E]very logical proposition and logic in its entirety must be deduced [*bewiesen werden*] from the *Wissenschaftslehre*” (SW I, 68).

² For a preliminary discussion of the logical proposals of 1812, see Martin 2003. A recent issue of this journal was devoted to themes in Fichte’s transcendental logic; see *Fichte-Studien* 15 (1999). But on the whole Fichte’s specifically logical doctrines have only recently begun to receive sustained attention from scholars and are still not well-understood.

³ “A judgment is the representation of the way that concepts belong to one consciousness universally, objectively. If one thinks two representations as they are combined together and together constitute one cognition, this is a judgment.” (Ak. 24, 928).

⁴ The three forms of relation allowed under Kant’s table of judgment forms are categorical, hypothetical, and disjunctive. In the first case one thinks “the relation of a predicate to a subject”; in the second one thinks the relation between two judgments; in the third one thinks “several judgments in their relation to each other.” (A73/B98). It would seem to follow that each of the recognized forms of judgmental relation requires a minimum of two concepts.

⁵ The proper specification of the analytic-synthetic distinction has been a matter of considerable controversy, but in the passage of the *Critique* which addresses this question explicitly, the distinction is defined only for judgments which involve pairs of concepts. See A6/B10.

⁶ “Synthesis of a manifold is what first gives rise to knowledge. ... [S]ynthesis is that which gathers together the elements of knowledge, and unites them to form a certain content. It is to synthesis, therefore, that we must first direct our attention, if we would determine the first origin of our knowledge.” (A77/B103)

⁷ I discuss several of Kant’s claims about singular existential judgment in Martin 2006: 42-55.

⁸ See Kant, Ak. 2: 73-74.

⁹ I discuss the function and status of these first principles in Martin 1997, ch. iv.

¹⁰ This section and the one that follows largely recapitulate material from Martin 2006: 55-73, which also incorporates a discussion of phenomenological issues pertaining to thetic judgment.

¹¹ Kuhn 1962.

¹² Herbart 1813, 35-37.

¹³ See for instance Drobisch 1836, 49; see also Brentano 1874, 211.

¹⁴ See Drobisch 1876 for Drobisch’s retrospective reflections on Herbart’s accomplishments.

¹⁵ Drobisch 1863, 11.

¹⁶ Comparing Drobisch 1851, §39 to Drobisch 1863, §40

¹⁷ For some exceptions to the general neglect of Brentano’s logic, see Chisholm 1982, and important discussions by Peter Simons (1987), and the Italian logician Roberto Poli (1993, 1998). Two essays by Burnham Terrell (1976, 1978) deal with Brentano’s treatment of quantification; for replies see Fischer and Miller 1976 and Chisholm 1976. Perhaps the most intriguing appropriation of Brentano’s logical

proposals is Kuroda 1972, which uses Brentanian logic in the analysis of Japanese syntax, and is still regularly cited in linguistics research.

¹⁸ Hillebrand 1891, Marty 1908. Franziska Mayer-Hillebrand also deserves mention here; it was she who assembled the source documents into a single treatise.

¹⁹ I have discussed Hume's contribution to these issues in Martin 2006, 21-36.

²⁰ For Mill's argument see Mill 1843, Book I, Chapter 5, esp. section 1.

²¹ Brentano 1874, 211.

²² For Kant's insistent claim that existential judgments are synthetic, see A598/B626.

²³ See Brentano 1874, 211; Brentano 1870-77, 124.

²⁴ See Brentano 1874, 213.

²⁵ See Brentano 1870-77, 113.

²⁶ "*Jeder richtige negative Urteil bleibt richtig wenn man seine Materie um beliebig viele Determinationen bereichert.*" (Brentano 1870-77, 209).

²⁷ There were limitations to this aim, however. In particular, Brentano rejected those classical inferences whose validity turned on an assumption of existential import in the universal affirmative form. Hence, for instance, he rejects the classical inference rule of subalternation. See Brentano 1870-77, 205ff; and for a discussion Simons 1987.

²⁸ For an overview of the issues involved, see Martin 2006, ch. iii.

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