1920s and 1930s. Perhaps; but it did not transform it beyond recognition. For one thing, logic itself was indelibly shaped by such things as Hilbert's recognition, and use, of varying interpretations. Secondly, logic eventually enabled some of Hilbert's questions about theories (e.g., concerning completeness) to be posed, and answered, in a precise way. Thirdly, the use of logic in foundational studies became a striking example of Hilbert's strategy of using mathematics to analyse mathematics. The genuine novelty wrought by mathematical logic was that it led to the discovery of certain limitations in the logical formulation of axiomatic theories, a consequence of which was the revelation that formal, axiomatic set theory surely cannot be a final foundational theory for mathematics, and that nothing else could be

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THEORIES OF JUDGEMENT

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1. THE COMBINATION THEORY OF JUDGEMENT

1.1. Introduction

The theory of judgement most commonly embraced by philosophers around 1870 was what we might call the 'combination theory'. This was, more precisely, a theory of the *activity* of judging, conceived as a process of combining or separating certain mental units called 'concepts', 'presentations', or 'ideas'. Positive judging is the activity of putting together a complex of concepts, negative judging is the activity of separating concepts, usually a pair consisting of subject and predicate, related to each other by means of a copula.

The combination theory goes hand in hand with an acceptance of traditional syllogistic as an adequate account of the logic of judging. In other respects, too, the theory has its roots in Aristotelian ideas. It draws on Aristotle's intuition at *Categories* (14b) and *Metaphysics* (1051b) to the effect that a conceptual complex may reflect a parallel combination of objects in the world. It had long been assumed by the followers of Aristotle that the phenomenon of judgement could be properly understood only within a framework within which this wider background of ontology is taken into account. The earliest forms of the combination theory were accordingly what we might call 'transcendent' theories, in that they assumed transcendent correlates of the act of judgement on the side of objects in the world. Such views were developed by Scholastics such as Abelard (e.g. in his *Logica Ingredientibus*) and Aquinas (*De Veritate* 1, 2), and they remain visible in the seventeenth century in Locke (*Essay* IV, V) as well as in Leibniz's experiments in the direction of a combinatorial logic, for example at *Nouveaux Essais*, IV.5

By 1870, however, there were few if any followers of Aristotelian or Leibnizian transcendent theories. For, by then, in the wake of German idealism, an immanentistic view had become dominant according to which the process of judging is to be understood entirely from the perspective of what takes place within the

mind or consciousness of the judging subject. The more usual sort of idealism in Germany in the second half of the nineteenth century conceives the objects of knowledge as being quite literally located in (as 'immanent to') the mind of the knowing subject. Windelband, for example, can define idealism in this sense as 'the dissolution of being into processes of consciousness'. Combination theories in this idealist spirit were developed in Germany by, among others, Gustav Biedermann, Franz Biese, Eduard Erdmann, Kuno Fischer, Ernst Friedrich, Carl Prantl, and Hermann Schwarz.

1.2. Bernard Bolzano's sentences in themselves

A somewhat exceptional case is provided by the *Wissenschaftslehre* of Bernard Bolzano, published in 1837. While Bolzano's work appeared some forty years before the period which here concerns us, its importance for the theory of judgement makes a brief exposition indispensable. Bolzano, too, defended a combination theory of judgement, but of a Platonistic sort. Bolzano tells us that all propositions have three parts, a subject idea, the concept of having, and a predicate idea, as indicated in the expression <A has b> (Bolzano 1837 [1972]: par. 127). Bolzano's theory of judgement distinguishes between (1) the *Satz an sich* (sentence in itself) which would now standardly be described as the 'proposition' and (2) the sentence thought or uttered. The former is an ideal or abstract entity belonging to a special logical realm; the latter belongs to the concrete realm of thinking activity or to the realm of speech or language.

A judgement, according to this theory, is the thinking of an ideal proposition, an entity outside space and time: 'By proposition in itself I mean any assertion that something is or is not the case, regardless whether or not somebody has put it into words, and regardless even whether or not it has been thought' (Bolzano 1837: par. 19 [1972: 20–1]). This Platonistic theory of judgement plays an influential role in the story which follows, and it is to be noted that theories similar to that of Bolzano were embraced later on in the nineteenth century by Lotze and by Frege in Germany, as well as by G. F. Stout in England.

According to Bolzano, truth and falsity are timeless properties of propositions, and every proposition is either true or false, though the property of having a truth value does not in Bolzano's eyes belong to the definition of the concept of a proposition (Bolzano 1837 [1972]: pars. 23, 125). Since judgement is the thinking of a proposition, the act of judgement can also be called true or false in an extended sense, and truth and falsehood can further be predicated of speech acts in which judgement is expressed.

Bolzano's theory serves to secure the objectivity of truth. First, truth is independent of consciousness; it obtains independently of whether it is ever thought or recognised. Second, truth is absolute; it does not depend on time or times. Third, the truth or falsehood of a judgement does not depend upon the context in which it is made (Bolzano 1837 [1972]: par. 25). This Bolzanian understanding of the objectivity of truth and knowledge was influential first of all in Austria (see Morscher 1986), and has had a wide influence thereafter.

1.3. Problems arising from the combination theory of judgement

As philosophical idealism itself began to be called into question around the middle of the nineteenth century so, by association, did the combination theory begin to be recognised as problematic. The first problem for the combination theory turned on the problematic character of existential and impersonal judgements like 'cheetahs exist' or 'it's raining'. Such judgements seem to involve only one single member, and so for them any idea of 'combination' or 'unification' seems to be excluded.

A further problem turned on the fact that, even in those cases where judging might be held to involve a combination of concepts or presentations, the need was felt for some further moment of affirmation or conviction, some 'consciousness of validity' in the idealist's terminology, or some 'assertive force' in the language of Frege. For otherwise the theory would not be in a position to cope with hypothetical and other logically compound judgements in which complex concepts or presentations seem to be present as proper parts of judgements without themselves being judged.

Other problems centred around the notion of truth. One important mode of valuation of a judgement is its truth value. It became clear to a number of philosophers around 1900 that to do justice to the truth of judgements it is necessary to recognise some objective standard, transcendent to the judgement, against which its truth could be measured. This marked a challenge to the assumption that conceptual combination provides all that is needed for an account of judgement. Even if judging involves a combination of concepts, the truth of a judgement must involve also something on the side of the object to which this judgement must involve also something on the side of the object to which this conceptual combination would correspond. Attempts were therefore made to come to terms with such objectual correlates, to establish what the objectual something is, to which our acts of judging correspond.

2. FRANZ BRENTANO

2.1. The concept of intentionality

It was Franz Brentano who was responsible for the first major break with the combination theory of judgement through the doctrine of intentionality set

forth in his *Psychologie vom empirischen Standpunkt* (Brentano 1874/1924 [1973: 77–100, esp. 88–9]). Knowledge, for Brentano, is a matter of special types of judgement. The psychological description and classification of judgements in all their modes of occurrence is thus in his eyes a necessary precursor to the theory of knowledge as a branch of philosophy. First, however, it is necessary to find a firm foundation for the science of psychology itself, and this requires a coherent demarcation of the proper object of psychological research. For this we need some unique property which would distinguish mental from other types of phenomena. Hence Brentano's much-mooted *principle of the intentionality of the mental*, which states that each and every mental process is *of* or *about* something.

Brentano distinguishes three basic types of mental or intentional phenomena: *presenting*, *judging*, and *phenomena of love and hate*. Each of these three types of mental phenomenon is determined by its own characteristic intentional relation or intentional directedness. A *presentation* is any act in which the subject is conscious of some content or object without taking up any position with regard to it. Such an act may be either intuitive or conceptual. That is, we can have an object before our mind either in sensory experience (and in variant forms thereof in imagination), or through concepts – for example when we think of the concepts of colour or pain in general. Presentations may be either (relatively) simple or (relatively) complex, a distinction inspired by the British empiricists' doctrine of simple and complex ideas. A simple presentation is for example that of a red sensum; a complex presentation that of an array of differently coloured squares (Brentano 1874/1924 [1973: 79f., 88f.]).

2.2. The existential theory of judgement

On the basis of presentation, new sorts or modes of intentionality can be built up. To the simple manner of being related to an object in presentation there may come to be added one of two diametrically opposed modes of relating to this object, which we call 'acceptance' (in positive judgements) and 'rejection' (in negative judgements). Both, for Brentano, are specific processes of consciousness.

Brentano's concept of acceptance comes close to that which is expressed by the English term 'belief'. Brentano did not distinguish clearly between judging and believing as he did not draw a clear distinction between mental *acts* and mental *states*. Acceptance and rejection are, however, to be distinguished from what analytic philosophers have called 'propositional attitudes'. The object of the latter is a proposition or abstract propositional content and Brentano has no room in his ontology for *entia rationis* of this kind.

A judgement for Brentano is either the belief or the disbelief in the existence of an object. Hence all judgements have one or other of the two canonical forms: 'A exists', 'A does not exist.' This is Brentano's famous *existential theory of judgement*. Its importance consists not least in the fact that it is the first influential alternative to the combination theory, a theory which had for so long remained unchallenged. The judgement expressed in the sentence 'Franz sees a beautiful autumn leaf that is wet and has the colour of lacquer red' ought, according to the existential theory, to be expressed as follows: 'The seen-by-Franz-lacquer-red-wet-beautiful-autumn-leaf is.' The judgement expressed in the sentence 'Philosophy is not a science' should be transformed into: 'Philosophy-as-science is not.' The universal judgement expressed in the sentence: 'All people are mortal' should be represented as: 'There are no immortal people' or 'Immortal-people are not.' Judgements can be further classified into probable/certain, evident/not evident, a priori/a posteriori, affirmative/negative, and so on. Brentano holds that each of these distinctions represents an actual psychological difference in the judgements themselves. As we shall see, the same cannot be said about the classification of judgements into true and false.

Like almost all philosophers in the nineteenth century, Brentano follows Aristotle in holding that a judgement's being brought to expression in language is a secondary phenomenon only – it is the act of judgement itself that is primary. It is not ultimately important what you say; it is important what you think. Yet the central role of linguistic analysis in the work of Brentano and his followers is remarkable. Crucial to Brentano's analysis of linguistic expressions is the distinction between *categorematic* and *syncategorematic* expressions. Syncategorematica are words that have meaning only in association with other words within some context. 'True', for example, is syncategorematic. This means *inter alia* that there is nothing real in virtue of which a true judgement differs from a mere judgement (as there is nothing real in virtue of which an existing dollar differs from a dollar). There is no property of judging acts to which the predicate 'true' refers. Brentano's successors applied this same kind of analysis to other cases, for example to the deflationary analysis of words like 'being' and 'nothing'.

2.3. The object of the judging act

If judging is the acceptance or rejection of something, then we still need to determine what this something is, which is accepted or rejected. This Brentano calls the judgement's *matter*. The mode in which it is judged (accepted or rejected) he calls the *quality* of the judgement. To understand these terms we need to look once again at Brentano's concept of intentionality. Unfortunately, the famous passage from his *Psychology* leaves room for a variety of interpretations (Brentano 1874/1924 [1973: 88–9]). One bone of contention concerns the relation between the objects of the three different types of mental acts. Are we to

assume that all acts are directed towards objects *in their own right*? Or is it acts of presentation that do the job of securing directedness to objects in every case? Judgements, emotions, and acts of will, according to the latter view, would be intentional only because of the underlying intentionality of the presentations on which they are founded.

A second point of dispute concerns relational and non-relational interpretations of the expression 'being directed towards an object' as a gloss on the phrase 'being intentional'. The relational interpretation of intentionality sees all mental acts as directed towards objects as their transcendent targets. That this is a somehow problematical interpretation can be seen by reflecting on the acts involved in reading fiction, or on acts which rest on mistaken presuppositions of existence. The thesis that all mental acts are directed towards objects in the relational sense, to objects external to the mind, seems in the light of such cases to be clearly false, unless, with Meinong, we admit other modes of being of objects, in addition to that of existence or reality.

In fact, however, a careful reading of Brentano's work dictates a non-relational (nowadays sometimes called an 'adverbial') interpretation of intentionality. This sees intentionality as a one-place property of mental acts, the property of their being directed in this or that specific way. When Brentano talks of directedness towards an object, he is not referring to putative transcendent targets of mental acts, to objects without the mind (a thesis along these lines has nonetheless repeatedly been ascribed to Brentano: cf. esp. Dummett 1988 [1993]: ch. 5). Rather, he is referring to immanent objects of thought, or to what, fully in the spirit of Brentano's treatment in the *Psychology*, can also be called 'mental contents'. The act of thought is something real (a real event or process); but the object of thought has being only to the extent that the act which thinks it has being. The object of thought is according to its nature something non-real which dwells in (*innewohnt*) a mental act of some real substance (a thinker) (Brentano 1930 [1966: 27]).

2.4. *The theory of evident judgement*

Brentano's theory of judgement is subjective in two senses. First, it is immanentistic as far as the objects of judging are concerned. Second, judgements are real events; they are mental states or mental episodes, a view which leaves no room for any view of truth and falsity as timeless properties along Bolzanian lines.

How, then, are we to tie the subjective realm of mental acts of judgement to the objective realm of truth? One solution to this problem would appeal to the traditional conception of truth as correspondence. Brentano, however, came to reject this idea; this was, among other reasons, because the correspondence

theory does not yield a *criterion* of truth, and Brentano believed himself to have found such a criterion in relation to what was for him a large and important class of judging acts, namely acts pertaining to the sphere of what he called inner perception (Brentano 1930). Hence Brentano moved to a so-called epistemological conception of truth, a move supported also by his view according to which 'truth' and 'false' are syncategoremata, that is, they do not refer to properties of acts of judging.

The central role in Brentano's theory of truth is played by the concept of evidence, and here we encounter an important Cartesian strain in Brentano's thinking. He divides all judgements into *judgements of fact*, on the one hand, and *axioms* or *judgements of necessity*, on the other. The former are of two types: judgements of inner perception (for example, when I judge that I am thinking, or in other words that *my present thinking exists*), and judgements of outer perception (for example, when I judge that there is something red, that *a red thing exists*). Evidence attaches to our judgements, Brentano holds, when there is what he refers to as an identity of judger and that which is judged. An experience of such identity is so elementary that it can be clarified only so to speak 'ostensively' in one's own particular acts of judging (Brentano 1928: par. 2 [1981: 4]). Such identity, and thereby our experience thereof, is ruled out for judgements of outer perception, but it is guaranteed for judgements of inner perception. 'Inner perception is evident, indeed always evident: what appears to us in inner consciousness is actually so, as it appears' (Brentano 1956: 154). Axioms, for Brentano, are illustrated by judgements such as: a round square does not exist. Such judgements have as their objects conceptual relations, and they, too, are always evident. Axioms are such that their truth flows a priori from the corresponding concepts (Brentano 1956: 141 ff., 162–5, 173; Brentano 1933 [1981: 71]). They are 'a priori' in the sense that they do not rely on perception (or on any judgements of fact). His favourite examples of the objects of axioms are, in addition to *a round square*, *a green red* and *a correct simultaneously accepting and rejecting judger*. All axioms, Brentano now insists, are negative, and are of the form 'An A that is B does not exist', 'An A that is B and C does not exist', and so on.

The judgements which are evident for beings like us include only inner perceptions and axioms. Brentano holds that we can judge truly also about the external world, but he insists that our judgements must remain 'blind' (a matter of hunch or guesswork) and that such judgements do not belong to our knowledge in the strict sense. Even true judgements that are not evident for us must however still be evident to a being (like God), that is able to judge about the same objects and in the same ways but in such a way that its judgements are accompanied by the experience of evidence.

3. ACT, CONTENT, AND OBJECT OF JUDGEMENT

Truth, on Brentano's epistemological theory, is subjective in that it depends on the subjective experience of evidence. At a deeper level, however, it is objective in the sense that the experience of evidence can at any given time be gained only in regard to the members of a restricted class of judgements that is fixed independently of the judging subject. (On Brentano's theory of truth see Brentano 1930, Baumgartner 1987, and Rojszczak 1994.)

What, now, of logic? Do logical laws enjoy an atemporal validity? This question pertains to what has come to be called the problem of *psychologism*. Brentano's solution to this problem was to argue that the objectivity of logic should be guaranteed by evidence, in exactly the same way that evidence guarantees the objectivity of truth. But such a concept of truth can reasonably be held to be related always to single cognitive acts and thus to a single judging subject. How, on this basis, are we to explain the fact that logic serves to yield a shared normative system of rules that every process of thinking is called upon to satisfy? Brentano himself provided no ultimately satisfactory answer to this question. His successors addressed the problem in two ways: on the one hand via close-grained investigations of the mental side of the acts of judgement, and on the other by a move from psychology to ontology: a move which led to the postulation of special *objects* of judging acts along lines already anticipated on the one hand in the work of the Scholastics and on the other hand in Bolzano's doctrine of the proposition in itself (see Nuchelmans 1973, Smith 1992).

3.1. Herman Lotze and Julius Bergmann: the concept of the Sachverhalt

It is above all in connection with the term *Sachverhalt* that the theorists of judgement towards the end of the century began once more to rediscover elements of the older, transcendent (realist) theories of the Scholastics. The term itself is derived from phrases in standard German usage like *wie die Sachen sich zueinander verhalten* (how things stand or relate to each other). The phrase occurs, albeit only in passing, in 1874 in Herman Lotze's *Logik*. He introduces his treatment of judgement by contrasting relations between presentations, on the one hand, with *relations between things (sachliche Verhältnisse)*, on the other (Lotze 1880). It is only 'because one already presupposes such a relation between things as obtaining', Lotze writes, 'that one can picture it in a sentence (*in einem Satz abbilden*)'. It is in talking of this relation between things as the transcendent target of judging that Lotze employs the term *Sachverhalt*, a term used in a systematic way by Julius Bergmann, a philosopher close to Lotze, in his *Allgemeine Logik* of 1879. For Bergmann, knowledge is that thinking 'whose thought content is in

harmony with the *Sachverhalt*, and is therefore true' (Bergmann 1879: 2–5, 19, 38). The *Sachverhalt* or state of affairs in the hands of Lotze and Bergmann thus serves as the objective component to which the judgement must correspond in order to be true.

Lotzean ideas on the objects of judgement were developed also in England through the influence of James Ward, who studied under Lotze after the appointment of the latter in Göttingen in 1844. Lotze's lectures were attended, too, by another close disciple of Brentano – Carl Stumpf.

3.2. Carl Stumpf: act and content of judgement

To understand what Stumpf achieved, we must recall Brentano's existential theory of judgement. The prototypical ontological correlates of judgement, in Brentano's eyes, are simply the immanent mental objects of presentation, for example the sense data, that are accepted or rejected in positive and negative judgements. Brentano's immediate followers, however, were inspired at least to some degree by Bolzano and by Lotze to seek ontological correlates of judging acts which would be categorially distinct from those of acts of presentation. But Stumpf, Marty, and others still saw these ontological correlates in terms that were in harmony with Brentano's existential theory. For the ontological correlate of the positive judgement 'A exists' they used terms like: 'the existence of A'; for the correlate of the corresponding negative judgement terms like: 'the non-existence of A'. Other types of judgement-correlate were also recognised: *the subsistence of A* (as the correlate of judgements about ideal objects and fictions), *the possibility of A, the necessity of A* (as the correlates of modal judgements), and so on. In 1888 Stumpf fixed upon the term *Sachverhalt* to refer to judgement correlates such as these, establishing a usage for the term which proved more influential than that of Lotze and Bergmann. The relevant passage appears in Stumpf's logic lectures of 1888, notes to which have survived in the Husserl Archive in Louvain, where we read: 'From the matter of the judgement we distinguish its content, the *Sachverhalt* that is expressed in the judgement. For example "God is" has for its matter God, for its content: the existence of God. "There is no God" has the same matter but its content is: non-existence of God' (MS Q 13, p. 4). The *Sachverhalt* is, then, that *specific content of a judgement* 'which is to be distinguished from the content of a presentation (the matter) and is expressed linguistically in "that-clauses" or in substantivized infinitives' (Stumpf 1907: 29f.).

Sachverhalte or states of affairs are assigned by Stumpf to a special category of what he calls *formations (Gebilde)*, entities he compares to the constellations of stars in the heaven, which we pretend to find in the sky above but which are in

fact creatures of the mental world. We can begin to make sense of this idea if we reflect that Stumpf's idea of a science of formations (Stumpf 1907: 32) was almost certainly influenced by the theory of manifolds developed by Georg Cantor, a colleague of both Stumpf and Husserl in the University of Halle. Recall Cantor's definition of a set (*Menge*) as 'any collection into a whole of definite and well-distinguished objects of our intuition or our thought' (Cantor 1895/1897: 282 [1915: 85]). Just as Cantor's work sparked a new sort of sophistication in the ontology of sets or collectives, so Stumpf's work on states of affairs represents an important milestone on the road to an ontologically more sophisticated theory of judgements of a sort which, as we shall see, would be fruitful for the purposes of modern logic.

3.3. *Kazimierz Twardowski: content and object*

It is Kazimierz Twardowski, a Polish student of Brentano, who makes the crucial break with the immanentistic position that had proved so fateful for theories of judgement throughout the nineteenth century. This occurs in his *Zur Lehre vom Inhalt und Gegenstand der Vorstellungen* (*On the Content and Object of Presentations*) of 1894, where Twardowski puts forward a series of arguments in defence of a distinction between the *contents* of presenting acts on the one hand, and their *objects*, on the other.

Twardowski begins his investigation with an analysis of the distinction between 'presentation' (*Vorstellung*) and 'that which is presented' (*das Vorgestellte*) as these terms had been used by the earlier Brentanists. Both terms are ambiguous. The first refers sometimes to an act or activity of presenting, sometimes to the content or immanent object of this act. The second refers sometimes to this immanent object (roughly: to an image of the real thing), sometimes to this real thing itself as it exists in independent reality. To prevent this confusion, Twardowski argues, we need to subject the distinction to a more precise analysis.

First, there are properties which we ascribe to the object that are not properties of the content: my image of the red rose is not itself red. Second, objects and contents are distinguished by the fact that the object can be real or not real, where the content lacks reality in every case. This thesis turns on Twardowski's distinction between 'to be real' and 'to exist'. The former applies only to spatio-temporal entities which stand in causal relations to each other. The latter applies also to putative *irrealia*, for example, to numbers and other abstract entities. Third, one and the same object can be presented via distinct presentational contents: thus, the same building can be seen from the front and from the back. Fourth, it is possible to present a multiplicity of objects via one single content, for example, via a general concept such as *man*. And finally we can make true judgements

Table 1

Presenting act (a thinking of an apple)	Content of presentation (an image of an apple)	Object of presentation (the apple)
Judging act (a positive judging [acceptance] of an apple)	Judgment-content (the existence of the apple)	State of affairs (an apple exists)

even about non-existent objects, as, for example, when we judge truly that Pegasus has wings. If there were no real distinction between content and object, then it would be impossible that the content of such a judgement could exist while the object did not. Twardowski defines the content of a presentation as the 'link between the act and the object of a presentation by means of which an act intends this particular and no other object' (Twardowski 1894 [1972: 28–9]). The object Twardowski characterises as follows:

Everything that is presented through a presentation, that is affirmed or denied through a judgement, that is desired or detested through an emotion, we call an object. Objects are either real or not real; they are either possible or impossible objects; they exist or do not exist. What is common to them all is that they are or they can be the *object . . .* of mental acts, that their linguistic designation is the name . . . Everything which is in the widest sense 'something' is called 'object', first of all in regard to a subject, but then also regardless of this relationship. (Twardowski 1894 [1972: 37])

In *On the Content and Object of Presentations*, Twardowski sees the act of judgement as having a special *content* of its own, but as inheriting its *object* from the relevant underlying presentation. For Twardowski as for Brentano and Stumpf, therefore, the content of the judgement is *the existence of* the relevant object. Three years later, however, in a letter to Meinong, Twardowski suggests that one should recognise also a special object of the judging act, in addition to the judgement-content (Meinong 1965: 143f.). He thereby effected a generalisation of the content–object distinction to the sphere of judging acts, in a way which yields a schema (see table 1).

Once the distinction between these three elements in the realm of judgement had been granted, a range of different types of investigations concerning judgement became possible. There arise, in the work of Meinong, Ehrenfels, Husserl, Marty, and other successors of Brentano, ontologies of states of affairs, and of related formations such as values and Gestalt qualities. Twardowski himself was interested primarily in the act and content of judging in relation to linguistic expressions, and he thereby initiated a tradition in Poland which led naturally

to the work of Tarski and others in logic and semantics in the present century (Woleński and Simons 1989, Woleński 1989, 1998, 1998, Rojszczak 1998, 1999). At the same time he revived among his Polish followers an interest in the classical correspondence-theoretic idea, a revival which was possible because he had acknowledged, in addition to the act and content of judging, also its truthmaking transcendent target.

4. EDMUND HUSSERL: JUDGEMENT AND MEANING

Of all works on the psychology and ontology of judgement produced in the wake of Brentano, it is Husserl's *Logische Untersuchungen* (*Logical Investigations*) of 1900/1 which stands out as the consummate masterpiece. Husserl, like Twardowski, distinguishes the immanent content and the object of a judging act (Husserl 1894, 1900/1: VI, par. 28, 33, 39). He recognises also the Brentanist concept of the quality of the act, but sees it as including not only the positive or negative factor of acceptance or rejection in an act of judgement, but also that factor which determines whether a given act is an act of judgement, of assumption, of doubt, and so on. At the same time he lays great emphasis on the fact that this moment of the act may vary even though its content remains fixed (Husserl 1900/1: V, par. 20). Thus I can *judge that* John is swimming, *wonder whether* John is swimming, and so on. This content is that moment of the act which determines the relevant object, as it also determines *in what way* the object is grasped in the act – the features, relations, categorial forms, that the act attributes to it (Husserl 1900/1: V, par. 20).

All of this is familiar from the writings of Brentano and Twardowski. Husserl's theory also has its counterparts in the writings of Frege, where the threefold theory of act, content, and object is translated into the linguistic mode, yielding the familiar distinction between expression, sense, and reference. Husserl's 'quality' corresponds to what, in Frege's theory of judgement, is called 'force' (Frege 1879: pars. 2–4). The more orthodox Brentanists had focused on psychology, on act-based approaches to the theory of judgement. Frege, notoriously, had difficulties integrating this psychological dimension into his language-based approach (see Dummett 1988 [1993], esp. ch. 10, 'Grasping a Thought'; Smith 1989a). It is Husserl who first succeeds in constructing an integrated framework in which the theory of linguistic meanings is part and parcel of a theory of acts and of the structures of acts. Indeed, Husserl's handling of the relations between language, act and meaning manifests a sophistication of a sort previously unencountered in the literature of philosophy (see Holenstein 1975).

In order to understand the originality of Husserl's views, it is important to note that the older Brentanists had an insufficient appreciation of the dimension of

logical syntax – a price they paid, in part, for their rejection of the combinatorial aspects of the older combination theory of truth and judgement. Thus they lacked any recognition of the fact that acts of judgement are distinguished from acts of presentation not only by the presence of a moment of assertion or belief (Brentano's acceptance/rejection), but also by a special *propositional form*. A judgement must, in other words, have a certain special sort of complexity. This complexity expresses itself linguistically in the special form of the sentence and is reflected ontologically in the special form of the state of affairs. To give an account of this complexity, of the way in which the various dimensions of the judgement are unified together into a single whole, Husserl utilises an ontological theory of part, whole, and fusion along lines set out in the third of his *Logical Investigations*.

According to Husserl, when we use a linguistic expression, the expression has meaning because it is *given* meaning through an act in which a corresponding object is given intentionally to the language-using subject. 'To use an expression significantly, and to refer expressively to an object', Husserl tells us, 'are one and the same' (Husserl 1900/1 [1970: 293]). An act of meaning is 'the determinate manner in which we refer to our object of the moment' (Husserl 1900/1 [1970: 289]). The object-directed and the meaning-bestowing component of the act are thereby fused together into a single whole: they can be distinguished only abstractly, and are not experienced as two separate parts in the act. Thus, the bestowal of meaning does not, for example, consist in some deliberate cognitive association of a use of language with some ideal meaning of a Platonistic sort. Husserl – in contrast to Bolzano or Frege – does not see meanings as ideal or abstract objects hanging in the void in a way that would leave them set apart from concrete acts of language use. Like Bolzano and Frege, however, Husserl needs some ideal or abstract component as a basis for his non-psychologistic account of the necessity of logical laws. He also needs to find some way of accounting for the fact that the meaning bestowed on a given expression on a given occasion can, in being communicated, go beyond the particular acts involved on that occasion. How can the same meaning be realised by different subjects at different places and times? Husserl's answer to this question is both elegant and bold: he develops an Aristotelian conception of the meanings of linguistic expressions as the *kinds* or *species* of the associated meaning acts.

To see what is involved here, we must first note that Husserl divides meaning acts into two classes: those associated with *uses of names*, which are acts of presentation, and those associated with *uses of sentences*, which are acts of judgement. The former are directed towards *objects*, the latter towards *states of affairs*. A meaning act of the first kind may occur either in isolation or – undergoing in the process a certain sort of transformation – in the context of a meaning

act of the second kind (Husserl 1900/1 [1970: 676]). The meanings of names, which Husserl calls concepts, are *species of acts of presentations*; the meanings of sentences, which Husserl calls propositions, are *species of acts of judgement*. And the relation between meaning and the associated act of language use is in every case the relation of species to instance, exactly as between, say, the species *red* and some red object. To say that my use of 'red' means the same as your use of 'red' is to say that our corresponding acts exhibit certain salient similarities. More precisely, we should say that, just as it is only a certain part or moment of the red object – its individual accident of redness – which instantiates the species *red*, so it is only a certain part or moment of the meaning act which instantiates any given meaning-species, namely that part or moment which is responsible for the act's intentionality, for its being directed to an object in just this way (Husserl 1900/1 [1970: 130, 337]; see also Willard 1984: 183f., Smith 1989b and references there given). The meaning *is* this moment of directedness considered *in specie*. The identity of meaning from act to act and from subject to subject is then the *identity of the species*, a notion which is to be understood against the background of that type of immanent realist theory of species and instances that is set forth by Aristotle in the *Categories*.

Meanings so conceived can become objects or targets of special types of reflective act, and it is acts of this sort which make up (*inter alia*) the science of logic. Logic arises when we treat those species which are meanings as special sorts of *proxy objects* (as 'ideal singulars'), and investigate the properties of these objects in much the same way that the mathematician investigates the properties of numbers or geometrical figures. Just as geometrical figures are what result when concrete shapes are treated *in specie*, disembarrassed of all contingent association with particular empirical material and particular context, so the subject-matter of logic is made up of what results when concrete episodes of using language are treated in abstraction from their material and context of use. And just as terms like 'line', 'triangle', 'hemisphere' are equivocal, signifying both classes of factually existing instantiations and ideal singulars in the geometrical sphere, so terms like 'concept', 'proposition', 'inference', 'proof' are equivocal: they signify both classes of mental acts belonging to the subject matter of psychology and ideal singulars in the sphere of meanings.

5. ALEXIUS MEINONG: OBJECTIVE AND ASSUMPTION

As we have seen, judgement, for Brentano, is a purely psychological phenomenon. The judging act is an act of consciousness in which an object of presentation is accepted or rejected. For Brentano, 'judgement' and 'belief' are synonymous terms, which means that Brentano has a problem in explaining those complex hypothetical judgement-like phenomena which appear for

example in our consideration of alternative possible outcomes of decision or choice and in other 'what if' scenarios. It was Meinong who filled this gap in his *Über Annahmen* (*On Assumptions*, 1902).

Consider, for example, the case where we assume that such and such is the case in a proof by *reductio*. Here no conviction is present, and it is the moment of conviction which distinguishes judging from assuming, in Meinong's eyes (Meinong 1902 [1983: 10–13]). But assuming is distinguished also from presenting; for assuming is, like judging, either positive or negative (Meinong 1902 [1983: 13–21]). Presentation is in a way passive in comparison with assuming and judging. Assumptions, often called by Meinong 'judgement-surrogates', thus form a class of psychic phenomena which lies between presentation and judgement (Meinong 1902 [1983: 269–70]).

Meinong's *On Assumptions* offers not only a new view of the psychology of judgemental activity but also, with its theory of *objectives* (Meinong's counterpart to Stumpf's *states of affairs*), a new contribution to the ontology of judgement. Objectives are, Meinong holds, the objects to which we are intentionally directed in both true and false judgements and in assumptions. Thinking is that kind of mental activity which refers to objectives. Objectives are objects of higher order, which means that they are built up on the basis of other, lower-order objects in the same sort of way that a melody is built up on the basis of individual tones. Some objectives are themselves built up on the basis of other objectives, as for example in the case of a judgement like 'If the meeting takes place, then we shall need to fly to Chicago.' The objective, as that towards which I am intentionally directed in a given act of judgement, is thus distinct from the object *about which* I judge. Thus in the judgement 'The rose is red' the object about which I judge is the rose, and the objective of the judgement is *the rose's being red*. The object about which I judge in the judgement 'Pegasus does not exist' is Pegasus; the objective of this judgement is *the non-existence of Pegasus*. Pegasus himself, as Meinong puts it, is a pure object, inhabiting a realm 'beyond being and non-being'. Truth, possibility, and probability are, according to Meinong, attributes not of objects but of objectives, and it is objectives, finally, which provide the subject matter for the science of logic. (See Meinong 1902 [1983]. This view makes itself felt in the early writings of Łukasiewicz, who studied for a time with Meinong in Graz. See for example Łukasiewicz 1910 [1987].)

6. ADOLF REINACH: STATES OF AFFAIRS, LOGIC, AND SPEECH-ACTS

As Adolf Reinach pointed out in 1911, however, there is a fundamental objection which must be raised against Meinong, namely 'that his concept of

objective runs together the two completely different concepts of proposition (in the logical sense) and state of affairs' (Reinach 1911 [1982: 374]). In his writings, Meinong refers to objectives as the *objects* (targets) of mental activities like judging or assuming, but equally as the *meanings* of the corresponding expressions. It was Reinach's contention that these two concepts should be pulled apart, that where propositions are the meanings of judgements, states of affairs are objectual *truthmakers*, in virtue of which judgements are true.

Reinach conceives the totality of states of affairs as an eternal Platonic realm comprehending the correlates of all possible judgements, whether positive or negative, true or false, necessary or contingent, atomic or complex. A state of affairs gains its foothold in reality through the objects it involves; a state of affairs is *of* or *about* these objects. But where objects may come and go, states of affairs are immutable. In this way Reinach is in a position to conceive states of affairs as the locus of existence of the past and of the future, that is, as truthmakers for our present judgings about objects which have ceased to exist or have yet to come into existence. He is by this means able to guarantee the timelessness of truth while at the same time avoiding that sort of running together of truth-bearer and truthmaker which is characteristic of the work of Bolzano and Meinong.

Reinach's ontology of states of affairs constitutes one further sign of the fact that, by 1911, the subject matter of logic had been expelled once and for all from the psyche. As a result, however, it became necessary for logicians to provide some alternative account of what this subject matter ought to be. Frege himself, along with Bolzano and, on some interpretations, also Husserl, had looked to ideal meanings; but ideal meanings have something mystical about them and they bring with them the problem of how they can be 'grasped' or 'thought' by mortal thinking subjects. Reinach, by contrast, looked neither to ideal meanings nor to the expressions of meanings in language, but rather to states of affairs, the objectual correlates of judging acts, as that which would serve as the subject matter of logic. A view of logic along these lines could serve as an alternative to psychologism, however, only if it could somehow guarantee the objectivity and necessity of logical laws. This Reinach achieved by viewing states of affairs in a Platonistic way: he granted them a special status of the sort that was granted to propositions by Bolzano and Frege or sets by Cantor. Yet because the objects involved in states of affairs are ordinary objects of experience, he is able to show how our everyday mental acts of judgement and our associated states of belief or conviction may relate, in different ways, to states of affairs as their objectual correlates. He is thus able to show how such mental acts and states may stand in relations parallel to the logical relations which obtain (as he sees it) among these state of affairs themselves. One of Reinach's most original contributions is in fact his account of the different sorts of acts in which states of affairs are

grasped and of the various kinds of attitudes which have states of affairs as their objects, and of how such acts and attitudes relate to each other and to the acts and attitudes which have judgements and propositions as their objects (see also Smith 1978 and 1987).

In his 1913 monograph on 'Die apriorischen Grundlagen des bürgerlichen Rechts' ('The A Priori Foundations of the Civil Law') Reinach extended this ontological treatment to uses of language of other, non-judgemental sorts, beginning with the phenomenon of promising and ending with an ontology of social acts which includes *inter alia* an account of sham and incomplete and otherwise defective acts, of acts performed jointly and severally, conditionally and unconditionally, and of that sort of impersonality of social acts that we find in the case of legally issued norms and in official declarations such as are involved in marriage and baptismal ceremonies. He thus elaborated the first systematic account of what would later be called the theory of 'speech acts'.

7. CONCLUSION

It has become a commonplace that Bolzano, Frege, and Husserl, by banishing meanings from the mind, created the preconditions for the objectivisation of knowledge and for the development of logic in the modern sense. By defending a view of thoughts or propositions as ideal or abstract entities, they made possible a conception of propositions as entities capable of being manipulated in different ways in formal theories. Just as Cantor had shown mathematicians of an earlier generation how to manipulate sets or classes conceived in abstraction from their members and from the manner of their generation, so logicians were able to become accustomed, by degrees, to manipulating propositional objects in abstraction from their contents and from their psychological roots in acts of judgement.

However, it is important to note that the achievements of Bolzano, Frege, and Husserl were part of a larger historical process, in which not only Lotze and Bergmann, but also Brentano, Stumpf, Meinong, Reinach – and Twardowski and his students in Poland – played a crucial role. In the period from 1870 to 1914, both logic and epistemology underwent a transformation both in object and method. The theory of judgement was transformed from being a theory of the processes of thinking (as a branch of psychology) into a theory of the meanings or contents of cognitive acts, a theory not of mental acts, but of what these acts are about, and this transformation served in its turn as an important presupposition of twentieth-century developments in logic and semantics.