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Frege, Lotze, and the Continental Roots of Early Analytic Philosophy

Gottfried Gabriel

The title of my essay implies the thesis that at least *early* analytic philosophy has its roots in the tradition of continental philosophy, especially in the philosophy of Hermann Lotze. Indeed, this is the thesis I want to argue for. The thesis itself is not really new. As far as Frege is concerned, it has been presented before by Hans Sluga in various papers as well as in his book on Frege. This book was the starting point of a controversy between Sluga and Michael Dummett about a crucial point of understanding Frege.¹ I do not want to go into the details, but, in developing my own position, it might be helpful to say a few words about this controversy. I agree with Dummett that some of Sluga's interpretations of Frege are not correct and that Sluga was misled by such interpretations in his evaluation of Frege as a philosopher. On the other hand, I agree with Sluga's general picture of Frege's philosophical background. I do not accept all of the details, but I think his thesis that Frege's efforts are part of the Neo-Kantian tradition is correct. Neo-Kantianism is to be understood as an alternative to German speculation in the tradition of Hegel, on the one hand, and to British empiricism in the tradition of Hume and Mill, on the other hand. Hermann Lotze, Frege's teacher at the University of Göttingen, can be regarded as the founder of Neo-Kantianism.

Agreeing with Sluga on these points does not imply accepting his bold assertion that Frege turns out to be a transcendental idealist. We should realize that to be a Neo-Kantian does not mean to be a Kantian in all respects. The Neo-Kantians worked in the spirit of Kant's philosophy, but they very often, and sometimes fundamentally, disagreed with the letter of his works. For example, most of them did not accept the thing in itself. What most of the Neo-Kantians shared with Kant was his apriorism. This apriorism links them together in their fight against every kind of naturalism with respect to the foundation of science (including logic, ethics, and aesthetics). But neither was it on the question of idealism or realism where

they agreed with one another. So it seems to me that Dummett's and Sluga's controversy about whether Frege was a realist or a transcendental idealist is not posed very well. Concerning Frege's philosophical background, other questions are much more central. This becomes clearer when we compare Frege with the Neo-Kantians *in detail*. And it is *here* where one can find a deficiency in Sluga's argument: Although his thesis that Frege belongs to the Neo-Kantian tradition seems to be correct, he does not really *show* that Frege was a Neo-Kantian. His thesis might be true, but he did not prove it. The evidence he presents is too thin. Insofar as this is the case, we have to concede to critics (like Dummett) that they are right not to be convinced.

What I want to do is to make Sluga's thesis more defensible, and to present some more historical evidence for it. Mainly, I will compare some of Frege's views with those of the two Neo-Kantians Otto Liebmann (1840–1912) and Wilhelm Windelband (1848–1915). What seems to me important here is the fact that both were influenced by Hermann Lotze, especially Windelband, who wrote his doctoral thesis at the University of Göttingen under Lotze 1870, shortly before Frege moved from Jena to Göttingen. Lotze was indeed a central figure in the whole intellectual scene before the unfortunate separation of continental and analytic philosophy. Especially the University of Jena became a center of Lotze studies.² Therefore, to understand Frege and the roots of analytic philosophy, we have to go back to this scene. It will turn out that Lotze's influence was not restricted to Germany; indirect reactions can even be found in the logical atomism of Russell and Wittgenstein.

I. The Philosophy of Hermann Lotze

It was J. Passmore who called Lotze the most "pillaged" philosopher of the nineteenth century.³ If we ask about Lotze's importance, we have to take into account especially his *Logic*, which impressed a whole generation of *academic* philosophers. In this connection we have to realize that though Lotze's *Mikrokosmos* was much more popular because it includes a complete *Weltanschauung*, its influence was restricted to popular philosophy, whereas academic philosophy was much more interested in Lotze's *System of Philosophy* (*System der Philosophie*). This *System* includes as its first part the *Logic*, as its second part the *Metaphysics*. Its third part on ethics, aesthetics, and philosophy of religion did not appear because of Lotze's sudden death in 1881.⁴

There is at least one Lotzean concept that unites continental and early analytic philosophy, namely, the concept of validity. Of course, the *concept* itself, that is, the distinction between the genetic point of view of *psychological* explanation and the foundationalist point of view of *logical* validity can already be found in Kant and Herbart and even in Leibniz, but it was Lotze who took up this tradition and established the distinction by introducing the term "validity" (*Geltung*). He prepared the logical discussion of nineteenth-century philosophy to argue against naturalistic tendencies that reduced thinking to processes of ideas (*Vorstellungsverläufe*). In doing so Lotze provided later philosophers like Frege, Windelband, and Husserl with antipsychologist arguments. On the other hand, we have to keep in mind that antipsychologism is not opposed to psychol-

ogy. Lotze belongs to the classic authors of psychology as well, but he was, at the same time, completely aware of the categorical difference between psychology and logic.

The concept of validity became the leading concept in the logical and epistemological doctrines up to the thirties of our century, until *Lebensphilosophie* and existential hermeneutics succeeded to dominate German philosophy. Although the central role of the concept of validity is not restricted to the German-speaking philosophical world, it is this German tradition about which I mainly want to talk. Concerning logic and epistemology, we may divide this tradition into two lines, namely, the Neo-Kantian and the phenomenological line. Both lines go back to Lotze. To be more correct, for there are two schools of Neo-Kantianism, it is the so-called southwest German school of Neo-Kantianism that is influenced directly by Lotze: besides Wilhelm Windelband and Otto Liebmann, there are Heinrich Rickert, Bruno Bauch, Emil Lask, and the early Martin Heidegger. The sociologist Max Weber also came into contact with this tradition via Rickert. The members of the so-called Marburg school seem to have been influenced only indirectly. Concerning the phenomenological tradition, we have to note that Franz Brentano was in contact with Lotze, and that his disciples Carl Stumpf, who was the teacher of Edmund Husserl, and Anton Marty were students of Lotze, too.

The most influential part of Lotze's *Logic* was the epistemology in the third book. This book includes in its second chapter "The World of Ideas" Lotze's reconstruction of Plato's theory of ideas in terms of the concept of validity. Let us have a more detailed look at this chapter. Lotze tries to defend Plato against the old Aristotelian accusation that he (Plato) had hypostasized ideas into real existing things. His argument runs as follows:

While Plato by . . . describing the Ideas, takes security for their independent validity, he has at the same time abundantly provided against the confusion of the validity thus implied with that wholly distinct reality of Existence which could only be ascribed to a durable thing. When he places the home of the Ideas in a super-celestial world, a world of pure intelligence . . . , when again more than this he expressly describes them as having no local habitation, such language makes it abundantly clear to any one who understands the mind of Greek Antiquity, that they do *not* belong to what we call the real world. To the Greek that which is not in Space is not at all, and when Plato relegates the Ideas to a home which is not in space, he is not trying to hypostasize that which we call their mere validity into any kind of real existence, but on the contrary he is plainly seeking to guard altogether against any such attempt being made. (Lotze, 1980, §318; references are to numbers of paragraphs)

We do not have to establish that this is a correct interpretation of Plato. From a logical point of view I myself like it very much, but we have to keep in mind that the non-conceptual, contemplative aspect of intellectual intuition (*intellektuelle Anschauung*) in Plato is neglected by Lotze. Anyway, what this interpretation achieved was the reunion of Platonic and Kantian philosophy in an epistemological position that might be, and in fact was, called "transcendental Platonism." I think that the position of Frege and some Neo-Kantians (like Windelband, Rickert, and Bauch) can be described exactly in this way. Transcendental Platonism is

Platonistic because it accepts contents of thinking (thoughts) that are independent of the individual thinking subjects, and it is transcendental (as opposed to transcendent) because the independence is not thought of as an ontological one of existence, but a logical one of being valid.

To put this idea into the form of a transcendental argument, we may give the following explanation: logic starts with making a “distinction of value” between “truth and untruth” (§II). True and untrue, or false, cannot appear as properties of *processes* of thinking, but only of *contents* of thinking. To talk about truth and falsehood necessarily presupposes—as a *conditio sine qua non*, that is, as a “condition of possibility” in the Kantian sense—that we have first grasped the same cognitive content and are discussing the same thought. To take this consequence seriously, we have to accept that a thought cannot be a psychological item, because such a view would imply that different individual subjects are not able to participate in the same cognitive content or thought.

The independence of thoughts thus means nothing more than stating the following categorical fact: An item which we want to value as true or false, that is, an item that is meant as the “bearer” of a truth-value, cannot have individual psychological existence. On the other hand, this does not imply that we have to search for some kind of *existence* different from psychological existence. Such an attempt is out of place, and insisting on such an attempt is a category mistake. **Cognitive content does not exist;** it is valid (or not valid). To be *valid* does not imply *to be*. To give a short and handy characterization of this position, we might explain it by converting the well-known Quinean slogan “no entity without identity” into the additional slogan “but identity without entity.” It is a transcendental condition of talking about truth and falsity that the bearer of a truth-value remains identical, but it is not necessary to accept this bearer as an ontological entity. Lotze’s conception of validity “as a form of Reality [*Wirklichkeit*]” presupposes “the eternally self-identical significance of Ideas,” but it does not include the “Being or Existence [*Sein*]” of these Ideas and their conceptual content (§317). Reality (*Wirklichkeit*) could come in here only on the level of **psychological events** or on the level of **logical validity**. To give a more complete account, let us take a look at a famous and often-quoted passage:

For we call a thing Real which is, in contradistinction to another which is not; an event Real which occurs or has occurred, in contradistinction to that which does not occur; a relation Real which obtains, as opposed to one which does not obtain; lastly we call a proposition Really true which holds or is valid as opposed to one of which the validity is still doubtful. (§316)

This quotation implies the following categorical distinctions:

Reality (*Wirklichkeit*)

- of things (*Dinge*): they are (*or exist*)
- of events (*Ereignisse*): they happen (*or occur*)
- of relations (*Verhältnisse*): they obtain
- of propositions (*Sätze*): they are valid (*or hold*).

These modes of reality are conceived of as independent from each other; it is not possible to explain one by reducing it to any other. What is missing in this scheme is the “self-identical” content of propositions themselves. Using Lotze’s own ter-

minology, which is not completely coherent here, we might say that he accepts for thoughts as the meanings of propositions the status of *objectivity* (§3), which is simply the negation of subjectivity, namely, the independence of these contents from singular subjects which might conceive these contents. The self-identical contents in themselves are objective but not real. They can get reality either in psychological realization as events or in being “really true,” that is, valid.

It should be clear that Lotze here prepared the categorical basis for the **separation of logical investigations from psychological ones**. The self-identical content of propositions later appeared, for instance, as *Gedanke* (Frege), *Sinngebilde* (Rickert), *Objektiv* (Meinong), *ideal identischer Inhalt* (Husserl), or *logischer Inhalt* (Heidegger). Concerning Lotze himself, we have to add that he was not completely clear about the fact that the content has to be accepted as the same even if it is not valid or true. “The conception of Validity,” Lotze explains, “at once excludes the substance of the valid assertion from the reality of actual being and implies its independence of human thought” (§316). The English translation here is a little bit artificial. The expression “the substance of the valid assertion” corresponds to nothing else but “valid content [*geltender Inhalt*]” in the German original. What is problematic here is the implicit restriction to *valid* assertions or contents, for the self-identity of the content does not depend on its validity. A content that is not valid has to be the same, too, otherwise we could not apply the categorical predicate “invalidity” to it. The transcendental condition of self-identity holds not only for valid but also for invalid contents. **This point was made clear by Frege in his article “On Negation,” as well as in the further development of logical value theory.**

This development may be divided into two strands. First there is the southwest German school of Neo-Kantianism, which extended Lotze’s conception of validity (*Geltung*) by building on its basis a comprehensive value theory that included the normative disciplines of logic, ethics, and aesthetics with their differentiation in regions of values. Considered from a historical point of view, this universal value theory was a philosophical response to Nietzsche’s nihilistic *Umsturz der Werte*. Neo-Kantianism tried to substitute Nietzsche’s will to power (*Wille zur Macht*) by a Kantian will to value (*Wille zum Wert*). Windelband used the phrase “will to truth [*Wille zur Wahrheit*].” In contemporary philosophy we find a revival of this debate in J. Habermas’s defense of a discourse-theoretical variant of the Neo-Kantian value-theoretical program against Nietzschean postmodernism. Habermas’s distinction between different claims of validity (*Geltungsansprüche*) goes back to Neo-Kantian concept, via the sociologist Max Weber.

Besides this Neo-Kantian development of Lotze ideas we have already mentioned the phenomenological tradition, which, at least in its beginning, was mainly concerned with logical (and ontological) questions. It was the phenomenologist Husserl who, following Fregean insights, made the Lotzean distinction between **objective (but not real) contents of thought and real events of thought** the starting point of his logical investigations. The very early Heidegger, who was a disciple of both Husserl and the Neo-Kantian Rickert, formulated this starting point in a way that shows very clearly the decisive influence of Lotze’s distinctions on the antipsychologist program. He wrote in 1912:

Fundamental to the recognition that psychologism is nonsensical and theoretically barren remains the distinction between mental act and

logical content, between the real, temporal process of thinking and the ideal, atemporal, identical sense, in short the distinction between what “is” and what “is valid.” The pure, self-subsistent sense in question is the topic of logic, and with that subject matter, the character of an empirical discipline is taken away from logic from the outset. (Heidegger, 1978, p. 22)⁵

I think this statement is very interesting because Heidegger, who at that time called Lotze’s *Logic* the “fundamental book [*Grundbuch*]” of modern logic (p. 23, fn. 9), later became (under the influence of *Lebensphilosophie*) the most radical critic of his own tradition. When we read in *Sein und Zeit* his polemics against the value theory of his time, which culminates in calling “validity” a “word-idol [*Wortgötze*]” (pp. 155–56), we should remember Heidegger’s beginnings. It seems to me that Lotze’s Platonistic departure from a restriction to existing things was at least one necessary step into the direction of Heidegger’s critique of the ontology of *Vorhandenheit*. This would explain why even in later years he recommended Lotze’s *Logic* to beginners in philosophy. An astonished-looking student, G. Picht, was informed by Heidegger that beginners should realize what hard work his (Heidegger’s) own thinking had had to go through.⁶ If we take this statement by Heidegger seriously, it seems to imply a general advice: Before reading Heidegger, first study Lotze’s *Logic* or, at least, do not read Heidegger without studying Lotze! Now I want to show that for a better understanding of Frege, we should read Lotze at least *after* studying Frege.

II. Frege and the Neo-Kantians

As we have already seen, Lotze used the word “logic” in the broader sense of the nineteenth century, thus as including epistemology. To show how Lotze’s conception of validity has influenced logic and epistemology of continental *and* analytic philosophy, we should now consider some aspects that both Neo-Kantians and Frege took over from Lotze. I will start with Otto Liebmann, the originator of the Neo-Kantian slogan “back to Kant.”

Liebmann was a colleague of Frege’s at the University of Jena from 1882 to 1911. In 1900 Frege was involved in a discussion and correspondence with the son of Otto Liebmann, Heinrich Liebmann (later professor of mathematics at the University of Heidelberg), about Hilbert’s *Grundlagen der Geometrie*. My comparison of Frege and Otto Liebmann concerns Frege’s *Grundlagen der Arithmetik* and Liebmann’s *Zur Analysis der Wirklichkeit*.

The fact that Frege refers to Kant directly in *Grundlagen* might be the reason that it has been overlooked that Frege’s views are similar to those of Liebmann. And indeed Frege does not even mention his elder contemporary, that is, Liebmann’s name appears nowhere in Frege’s works. (Hermann Lotze and Wilhelm Windelband met the same fate.) It might be interesting here to mention that Frege had indeed read Liebmann’s *Analysis der Wirklichkeit*. Frege borrowed Liebmann’s work from the Jena University library when he was writing his *Grundlagen*.⁷ This fact should serve to remind us that the absence of names does not imply the absence of influence or of agreement. Now let us get into the texts of Liebmann and Frege.

First of all, we find agreement between them on the conception of the a priori. Against empiricism and its overvaluation of induction, Liebmann maintains that

induction is impossible without “general fundamental truths [*allgemeingültige Fundamentalwahrheiten*]” (Liebmann, 1900, p. 208). In the same vein, Frege declares in his *Grundlagen*:

If we recognize the existence of general truths at all, we must also admit the existence of such primitive laws, since from mere individual facts nothing follows, unless it be on the strength of law. Induction itself depends on the general proposition that the inductive method can establish the truth of a law, or at least some probability for it. If we deny this, induction becomes nothing more than a psychological phenomenon, a procedure which induces men to believe in the truth of a proposition, without affording the slightest justification for so believing. (Frege, 1953, p. 4, footnote)

We can find the source of Liebmann’s and Frege’s view of induction in Lotze’s *Logic*:

It is clear therefore that the attempt to derive the entire body of general knowledge from experience, that is to say from a mere summing up of particular perceptions, breaks down. We have invariably to help ourselves out by assuming at one point or another some one of those self-evident principles, some principle to which when once its content has been thought we at once concede with intuitive confidence that universal validity to which it makes claim. (Lotze, 1980, §330, last section)

The quotation from Frege above refers to the Lotzean distinction between questions of genesis (*Genese*) and questions of validity (*Geltung*). Epistemology is not concerned with the genetic-psychological question of how it is that we accept some propositions as true. Rather, epistemology deals with the question of the validity of these propositions, that is, with the question of the justification of a true proposition. Like Kant, Lotze and the Neo-Kantians conceded that from a genetic point of view all knowledge might have its origin in experience. But they deny that this shows that all knowledge is empirical. When we seek to justify the foundation of knowledge, we have to accept propositions that are nonempirical a priori truths. In this sense Frege points out in *Grundlagen*:

By this I do not mean in the least to deny that without sense impressions we should be as stupid as stones, and should know nothing either of numbers or of anything else; but this psychological proposition is not of the slightest concern to us here. Because of the ever-present danger of confusing two fundamentally different questions, I make this point once more. (Frege, 1953, p. 115, footnote)

It is the same confusion that Liebmann addresses by distinguishing psychological laws from laws of knowledge (*Erkenntnisgesetze*). For him the psychological laws are natural laws of the changing content of the mind, whereas the laws of knowledge are norms that must be followed if we want to reach the truth (Liebmann, 1900, pp. 251–52).

So far we have considered the general basic consensus between Frege and the Neo-Kantians in the tradition of Hermann Lotze. A more specific agreement between Liebmann and Frege emerges when we look at their views about mathematics. Here they both disagree with Kant in a significant respect: the status of arith-

metic in relation to geometry. As is well known, Frege agrees with Kant's view that geometry is an a priori synthetic science. Frege's reason is that insight into the validity of the geometrical axioms is impossible without intuition. But unlike Kant, Frege wants to demonstrate in his *Grundlagen* that arithmetic is a branch of logic and therefore an *analytic* a priori science. Frege tries to make this so called logicism of the *Grundlagen* plausible by considering the differences between the domain that is "governed" by the truths of arithmetic and that governed by the truths of geometry (Frege, 1953, §14). He states that the domain of geometry is (in opposition to the temporally intuitible) "all that is spatially intuitible [*das räumlich Anschauliche*]". This includes the actual as well as the fictitious. This assignment of domains amounts to a restriction of geometry in relation to arithmetic. Frege argues: "The truths of arithmetic govern all that is numerable. This is the widest domain of all; for to it belongs not only the actual, not only the intuitible, but everything thinkable" (Frege, 1953, p. 21). For Frege these considerations were helpful in making the logicist program plausible *before* carrying it out. So he concludes with the suggestive question: "Should not the laws of number, then, be connected very intimately with the laws of thought?" Now, Frege starts his attempt to draw arithmetic into the domain of nonintuitive conceptual (pure logical) thinking with a short treatment of non-Euclidean geometry. Frege states that a non-Euclidean space cannot be intuited, but can be thought. Among his arguments is the following: to assume the negation of an axiom of Euclidean geometry does *not* involve thought in self-contradiction; whereas assuming the negation of any basic law of arithmetic does. Frege's treatment of non-Euclidean geometry seems to be inspired directly by Otto Liebmann, who defended non-Euclidean geometry from a Kantian (!) point of view. Liebmann distinguishes between "logical necessity" and "necessity of intuition." He says that the negation of an intuitively necessary proposition is not a contradiction, it is merely not intuitible. Pointing out that he agrees with Kant essentially, Liebmann maintains that the axioms of (Euclidean) geometry are nonlogical necessities that are nevertheless unavoidable for beings with intuitive capacities like ours; in this sense they are a priori intuitions. And because they are a priori *intuitions*, they are subjective. Of course, Kant would not have agreed with this last point.

I think Frege agrees with all points of this reformulation of Kant, even with the last one, namely, the view that the Euclidean axioms are subjective. This can be seen in Frege's definition of objectivity, which includes independence of intuition (Frege, 1953, §26, last sentence). Dummett has argued against Sluga that Frege's view of geometry is not really Kantian.⁸ In a way, Dummett is right here, and Sluga is perhaps too vague. It turns out that Frege was not a Kantian, but a *Neo-Kantian*.

Liebmann's discussion of geometry concludes with some views on the relationship between arithmetic (*Größenlehre*), logic, and geometry which we have already found in Frege's *Grundlagen*. For Liebmann, the "extension or domain of validity" of arithmetic and logic is broader than that of Euclidean geometry. Whereas the latter is valid only for an intelligence with the same type of intuition, arithmetic and logic are valid for all intelligent beings whatever (Liebmann, 1900, p. 254). Consequently, both Frege and Liebmann come to the same judgment about actual and possible beings whose laws of logic and arithmetic (not of

geometry) would contradict ours. One would have no choice but to regard them as “mad [verrückt]” (Liebmann, 1900, p. 253; Frege, 1962, vol. 1, p. xvi).

We can conclude our comparison between Liebmann and Frege with an amusing example of an implicit agreement. This agreement consists in some polemic remarks against German physiological materialism (represented, e.g., by Vogt, Moleschott, Büchner). From a Neo-Kantian point of view, this position is a good example of confusing the question of validity with questions of genesis as a consequence of confusing the laws of thought with its natural physiological conditions. Liebmann asks polemically: “What have the protein, potash and phosphorous in the brain-substance [. . .] got to do with logic?” (Liebmann, 1900, p. 540). And in the “Introduction” to the *Grundlagen*, Frege exclaims ironically: “Otherwise, in proving Pythagoras’ theorem we should be reduced to allowing for the phosphorous content of the human brain” (Frege, 1953, p. vi). Without mentioning the name, Liebmann and Frege here obviously (obviously at least for their readers in the nineteenth century) refer to a slogan of Jacob Moleschott, who wrote in his *Der Kreislauf des Lebens*: “No phosphorous no thought.”

Looking for further circumstantial evidence for Frege’s connection to Neo-Kantianism, we now come to Windelband. Several of Liebmann’s and Frege’s Neo-Kantian positions also appear in Windelband’s writings. For instance, we can find the distinction between genesis and validity (Windelband, 1915, vol. 1, p. 24) and the view that induction is impossible without nonempirical presuppositions which must, without proof, be acknowledged as general laws (vol. 2, p. 107), or, as Frege puts it in the *Grundlagen*, “which neither need nor admit of proof [*die selber eines Beweises weder fähig noch bedürftig sind*]” (Frege, 1953, §3). By the way, this formulation is an acknowledged quotation from Lotze (Lotze, 1874, §200). It goes back to Leibniz and corresponds to the conception of axioms in Aristotle’s *Analytica posteriora*. What is said about general laws holds in particular of the laws of logic, which both Windelband and Frege consider to be unprovable presuppositions of *all* thought (*Denken*).

Nevertheless, Windelband demands, and Frege develops, an argument for why we must accept the laws of logic. As Windelband and Frege stress, this argument itself cannot be a logical one (i.e., it cannot give a logical reason). Following Windelband’s presentation, it is a teleological one of the following form: *if we want to fulfill the purpose of thought, that is, truth, we are forced to accept the laws of logic* (Windelband, 1915, vol. 2, p. 109). Frege refers to this kind of transcendental argumentation, which he delegates to epistemology,⁹ when he says: “We are compelled to make judgments by our own nature and by external circumstances; and if we do so, we cannot reject this law—of Identity, for example; we must acknowledge it unless we wish to reduce our thought to confusion and finally renounce all judgment whatever” (Frege, 1982, p. 15). Though Frege “neither dispute[s] nor support[s] this view,” he in fact accepts it: “This impossibility of our rejecting the law in question hinders us not at all in supposing beings who do reject it; where it hinders us is in supposing that these beings are right in so doing, it hinders us in having doubts whether we or they are right. At least this is true of myself” (p. 15).

The basis of Windelband’s transcendental-teleological argumentation is his theory of values. Windelband is the founder of the value-theoretical *Südwestdeutsche*

school of Neo-Kantianism. He used the term “truth-value” (*Wahrheitswert*) before Frege (Windelband, 1915, vol. 1, p. 32). It should be added that Liebmann (1900, pp. 252–53), too, considers truth as “value.” Also, once more the trail goes back to Lotze, who speaks of the “value-difference” (*Wertunterschied*) between truth and untruth (Lotze, 1874, p. 4). Frege was not concerned with all of the values treated by value theory, but only with the value “true.” Yet, in the opening passage of “Der Gedanke” he refers to the same triad of values as Windelband: “Just as the word ‘beautiful’ points the way for aesthetics and ‘good’ for ethics, so does ‘true’ for logic.” Moreover, Frege states an “affinity” of logic with ethics (Frege, 1979, p. 4) and thus follows the Windelbandian connection of the teleological and the value-theoretical aspects of truth: “Like ethics, logic can also be called a normative science. How must I think in order to reach the goal, truth?” (p. 128).

Seen against the background of the Neo-Kantian value-theoretical tradition, even Frege’s problematic connection between truth-value and *Bedeutung*, that the *Bedeutung* of a sentence is its truth-value, becomes more plausible.¹⁰ Finally let us have a look at the indirect reception of Lotze’s philosophy in logical atomism (Russell, Wittgenstein).

III. Monism, Logical Atomism, and the Fregean Context Principle

So far we have considered the influence of Lotze’s *Logic*. Lotze’s *Metaphysics* was influential in some respects, too, but more in the English Neo-Hegelian tradition than in the German Neo-Kantian tradition. To give some hints concerning the British reception of Lotze’s philosophy, we have to note that the English translations of Lotze’s *Logic* and *Metaphysics* were prepared by the Neo-Hegelians, especially by B. Bosanquet, who was the editor of both books (the translation was initiated by T. H. Green). The Neo-Hegelians mainly agreed with Lotze on his ontological holism, which consists of the thesis that the being of things (*das Sein der Dinge*) means standing-in-relation (*in Beziehung stehen*). They took this conception as the basis of their holistic monism; compare, for instance, Bradley’s view that “reality is not made up of separate objects with relations among them” (Hylton, 1990, p. 54).

It is interesting and amusing to look at the reception of this holistic thesis in British philosophy. Holism was criticized as a result of Hegelian monistic idealism by Bertrand Russell from a logical atomistic point of view, or, to put it the other way around, Russell tried to overcome the Hegelianism of his own time by means of logical atomistic arguments against holistic implications of Hegelianism. Following the *modus tollens*, a theory that implies a wrong thesis is itself wrong. As Russell declares in *The Philosophy of Logical Atomism*: “The logic which I shall advocate is atomistic, as opposed to the monistic logic of the people who more or less follow Hegel” (Russell, 1972, p. 32). Compare also later his emphasis concerning his logic as opposed to monistic logic:

The acquaintance with the simpler is presupposed in the understanding of the more complex, but the logic that I should wish to combat maintains that in order thoroughly to know any one thing, you must know all its

relations and all its qualities, all the propositions in fact in which that thing is mentioned; and you deduce of course from that that the world is an interdependent whole. It is on a basis of that sort that the logic of monism develops. (Russell, 1972, p. 59)

Although Russell is arguing here against the Hegelianism of his time, the position described is, in some respects, similar to that of Lotze, who, as a disciple of C. H. Weiße, was in contact with Hegelianism. The irony is now that analytic philosophy, following the anti-Hegelian tradition, which identifies the birth of analytic philosophy with Russell's break with Hegelianism, had to rediscover holism via the Fregean context principle, "nach der Bedeutung der Wörter muss im Satzzusammenhange, nicht in ihrer Vereinzelung gefragt werden" (Frege, 1986, p. 10). The context principle appears as a semantic version of a metaphysical Hegelian principle that Frege took over from his teacher Lotze, while restricting it to propositions. Frege did not defend a holism outside of propositions, that is, he did not hold a coherence theory of truth.

It is the same in the case of Wittgenstein (in the *Tractatus*). Here the formulation of the context principle is the following: "Only propositions have sense; only in the nexus of a proposition does a name have meaning" (Wittgenstein, 1966, 3.3). In Wittgenstein's ontological way of speaking, an object can occur only within a state of affairs and cannot exist on its own (2.0121). The independence of things is only a relative one: "Things are independent in so far as they occur in all possible situations, but this form of independence is a form of connexion with states of affairs, a form of dependence. (It is impossible for words to appear in two different roles: by themselves, and in propositions.)" (2.0122). As a consequence, Wittgenstein acknowledges that objects do have internal properties and that these properties are essential ones: "If I am to know an object, though I need not know its external properties, I must know all its internal properties" (2.01231).

Wittgenstein does not go as far as Bradley and Lotze. For Lotze the possibility of understanding the world-process (*Weltlauf*) is grounded in thoroughgoing (*durchgängigen*) relations that connect all objects with one another (*welche alle Dinge miteinander verknüpfen*) (Lotze, 1872, p. 483). Wittgenstein does not defend the holistic chain of all beings, but he accepts the chain of beings *inside* a state of affairs: "In a state of affairs objects fit into one another like the links of a chain" (Wittgenstein, 1966, 2.02). So Wittgenstein's holistic internalism is restricted to states of affairs and thus to elementary propositions. But we have to realize that his logical atomism works only on the higher level of complex propositions.

Wittgenstein's view that things have only a relative independence appears almost in the same formulation already in Lotze's writings. This becomes quite clear if we compare the German originals:

Das Ding ist selbständig, insofern es in allen *möglichen* Sachlagen vorkommen kann, aber diese Form der Selbständigkeit ist eine Form des Zusammenhangs mit dem Sachverhalt, eine Form der Unselbständigkeit. (Es ist unmöglich, daß Worte in zwei verschiedenen Weisen auftreten, allein und im Satz.) (Wittgenstein, 1966, 2.0122)

Allerdings müssen die Dinge *sein*, um sich aufeinander beziehen zu können; aber dies noch beziehungslos gedachte Sein, das wir uns als Grund der Möglichkeit des bezogenen vorstellen, ist nicht eine für sich

vorkommende Wirklichkeit, aus der die Dinge in gegenseitige Beziehungen treten, und in welche sie sich aus allen Beziehungen zurückziehen könnten; vielmehr besteht es nur latent in den Formen des bezogenen Seins, unabtrennbar von diesen [. . .]. (Lotze, 1872, pp. 483–84; cf. p. 473)¹¹

If we take into account the reception of ideas, we can see that even Wittgenstein's use of the context principle is indirectly connected with Hegel-Lotzean holism. Against this background it is less astonishing to find common views between English Neo-Hegelians and Frege.¹² Both learned from Lotze or at least from the widespread discussion about Lotze's philosophy. In the case of the context principle, we have a good example of how it can happen that historical ignorance forces one to discover old ideas in a new way. At least we see that in the *history* of ideas holism might be an adequate approach: everything seems to be connected with everything, even such things as continental and analytic philosophy.

Notes

I am grateful to Erich Reck for correcting my English in this essay.

1. Sluga, 1980; Dummett, 1981.

2. Cf. Kreiser, 1984, p. 23.

3. Passmore, 1966, p. 49.

4. For more historical and biographical details, see Pester, 1997.

5. Translated by Erich Reck; in the original German: "Grundlegend für die Erkenntnis der Widersinnigkeit und theoretischen Unfruchtbarkeit des Psychologismus bleibt die Unterscheidung von psychischem Akt und logischem Inhalt, von realem in der Zeit verlaufenden Denkgeschehen und dem idealen außerzeitlichen identischen Sinn, kurz die Unterscheidung dessen, was 'ist,' von dem, was 'gilt.' Dieser reine, in sich Bestand habende Sinn ist Gegenstand der Logik, und damit wird ihr von Anfang an der Charakter einer empirischen Disziplin genommen."

6. Picht, 1977, p. 201.

7. Kreiser, 1984, pp. 25–26.

8. Dummett, 1982.

9. Cf. Gabriel, 1996.

10. Gabriel, 1984.

11. Cf. Lotze, 1884, §§13–14.

12. Manser, 1984, pp. 307–8.

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