Reviewed by Michael Kremer
Review: *Frege on Sense and Reference*, by Mark Textor

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Mark Textor’s book, *Frege on Sense and Reference*, is published in the *Routledge Philosophy GuideBooks* series, which is intended to “painlessly introduce students to the classic works of philosophy.” (http://www.routledge.com/books/series/SE0129/) The front matter for the book identifies students as the intended audience: it “helps the student to get to grips with Frege’s thought,” and is “ideal for those coming to Frege for the first time.” It is also described, however, as “containing fresh insights for anyone interested in his philosophy,” (i) and I agree with this last assessment: there is much to appreciate in this book, especially for the Frege specialist. But I cannot give an equally positive evaluation of the book’s usefulness for its primary intended audience. This is not the book I would give to a student needing a guide to Frege’s thought.

So, there is good news and bad news. I will begin with the good. In the first half of the book, Textor provides a novel and detailed interpretation of the development of Frege’s thought, and especially of the sense-reference distinction. He works to place this development in the context of Frege’s reaction to Kant’s views of mathematical knowledge and his project for a *Begriffsschrift*. He explains Frege’s theory of “judgeable content” in the *Begriffsschrift* and the way this bifurcates into sense and reference in his mature philosophy, providing a detailed and careful analysis of the crucial opening paragraphs of “On Sense and Reference” in the central fourth chapter of the book. In the final three chapters he discusses Frege’s views on the sense and reference of singular terms, assertoric sentences, and concept-words. These chapters include a good deal of useful and interesting discussion of such recent and contemporary critics of Frege as Evans, Perry, Kaplan, Kripke, Dummett, Sullivan, and Burge. Thus they both elaborate and explain Frege’s thought in interesting ways, and sketch and respond to its reception.

There is much interpretive and philosophical work here that is valuable and worthy of discussion. The developmental story Textor works out in chapters 1-4 is, in the main, cogent and convincing. He argues that in his early work, Frege tried to combine two distinct ideas under the heading of “judgeable content.” On the one hand, content was to be inferentially individuated: two contents with the same consequences, given the same additional premises, would be identical. On the other hand, content, that which is held to be true in judgment, was something like a circumstance or state-of-affairs. Frege expresses this latter conception by suggesting that we read formulae of the *Begriffsschrift* prefaced with the content-stroke (horizontal) as sentence-nominalizations of the form “the circumstance that *p*,” that the assertion-stroke is the sole predicate of the *Begriffsschrift*, and that every formula of the *Begriffsschrift* has the form “the circumstance that *p* is a fact.” On this conception of content, the objects that a judgment or assertion is about are constituents of the content that is judged or asserted. However, as Frege came to see by reflecting on the status of
identity sentences, this conception cannot be stably combined with a view of content as inferentially individuated. It is the latter idea which seems to fit the announced purpose of the Begriffsschrift—to represent only those aspects of content which are relevant to inference. This in turn is subservient to the goal of determining the epistemological status of arithmetic by producing gap-free proofs with no hidden presuppositions.

In chapter 4, Textor shows how the tension between these two conceptions plays out in the splitting of content into the later categories of sense and reference. This interpretation is compelling in both its general structure and much of its detail. Textor enriches his reading of Frege further by paying careful attention to Frege’s views on the sense and reference of concept-words. He builds his discussion on an interesting analysis of the early Frege’s replacement of the traditional subject/predicate analysis of sentences and judgments with an analysis into function and argument. In chapter 3, he provides an illuminating model for this analysis based on the idea of focus in linguistics: different function/argument analyses of the same sentence correspond to different choices of which component expressions to put in focus. He returns to this model in chapter 7 to explain Frege’s distinction between concepts and objects.

Textor’s argument also depends on a careful reading of Frege’s remarks on inference as a judgment (acknowledgment of the truth of a thought) which is grounded on other judgments, and an analysis of the relation of this conception of inference to his account of content (early) and thought (later). This theme runs throughout the book and plays important roles in his explication of Frege’s key arguments in “On Sense and Reference” as well as in an extended and illuminating discussion of Frege’s treatment of indexicals in chapter 5.

Textor’s reading of Frege introduces some important new ideas which can spark a fruitful critical engagement. Consider, for example, chapter 6, in which he strives to make the best sense possible out of Frege’s treatment of assertoric sentences as names of truth-values. He draws attention to the notion of “acknowledgment” (“Anerkennung”) in Frege’s slogan “judgment is the acknowledgment of the truth of a thought.” (209) He distinguishes three meanings of “to acknowledge” (“anerkennen”): legal (acknowledging a claim), evaluative (acknowledging a person’s achievements), and “ontic” (acknowledging numbers, accepting their existence). (214-5) While other interpreters have attended to the legal and evaluative force of “acknowledge,” Textor chooses to “focus on the ontic meaning because an appeal to the legal and normative meaning … won’t help Frege to argue for the existence of the True and the False.” (215) He takes Frege’s remark in “On Sense and Reference” that the truth-values “are acknowledged, if only implicitly, by anyone who judges” (Textor’s translation, 209) to mean that anyone who judges must admit the existence of the two truth-values. He shows that Frege uses “acknowledge” in the ontic sense in other contexts, and contends that Frege’s arguments concerning the status of the truth-values as objects can be understood by treating judgment as acknowledgment in this ontic sense.

This is a nice and original way to understand Frege’s argument that sentences must have a reference. At times Textor seems to think that we can also use this idea to explain why Frege claims
that there are exactly two truth-values, the True and the False—that all true thoughts refer to the same object (and similarly for all false thoughts). Thus he holds that a judgment (S judges that p) can be analyzed into the subject, the attitude of acknowledgment, and an object, the truth of p. He argues that by Frege’s tests for singular terms, “the truth of p” “stands for an object, the True. This object is acknowledged in judgment.” (216) If this argument worked, it would follow that “the truth of q” would equally stand for the True, for any true thought q. But there is a difficulty here, which Textor admits a few pages later: the ontic sense of acknowledgment does not force us to identify “the truth of p” with “the truth of q” for distinct p and q. “What we know so far leaves open that every thought has a truth-value distinct from the truth-value of all other thoughts. For example, a philosopher who believes in circumstances can accept what Frege said so far and argue that a true thought is a mode of presentation of a particular circumstance that obtains.” (221)

Textor addresses this problem by considering the role of the structure of a thought in a judgment acknowledging its truth: “if one makes judgements, one decomposes thoughts into modes of presentations [sic] of concepts and objects. If the concepts presented in a thought under one decomposition are applied to the objects presented in this decomposition, the result is the truth (falsity) of the thought.” This is “the object that is functionally determined by the objects and functions presented by the thought.” He then argues for a “substitution principle” guaranteeing that this object, “the truth-value of the thought,” will not change if one replaces constituent senses within the thought with other senses presenting the same object, and concludes that “this substitution principle together with further premises yields the conclusion that every true thought presents the True, every false thought the False.” (224, my emphasis) Although the “further premises” are never specified, they must be doing the work here. For the substitution principle is satisfied if we identified “the truth of the thought” with a circumstance or state-of-affairs. Textor’s work has not really moved us a step beyond the problem identified at the beginning of the section. (221) Moreover, there is a silent shift from “the truth of a thought” to “the truth-value of a thought” which goes unjustified and unnoted in the middle of this argument. (224) In fact, Textor provides no explanation of why Frege calls the objects, which must be acknowledged (ontically) by anyone who judges, “truth-values” (Wahrheitswerte).

Here, I would argue, the evaluative dimension of “acknowledge” (anerkennen), along with its etymological relation to “knowledge” (Erkenntnis) should be brought into play. Truth-value is one dimension of “cognitive value” or knowledge-value (Erkenntniswert): the dimension along which we sort claims to knowledge into those which succeed in saying how things stand, and those which do not. Truth-value does not exhaust knowledge-value—there is another dimension along which we sort such claims according to what is claimed. This corresponds to the thought whose truth is acknowledged. But recognizing the evaluative dimension of “acknowledge” helps us to see why there must be two truth-values, and why these are values.

When he introduces the ontic sense of “acknowledge,” Textor points out that “the evaluative view of judgment was prominent
in Frege’s time,” referring to Lotze and especially his student Windelband, who “took it to be uncontroversial that ‘is true’ is a value predicate.” But Textor thinks it is “implausible that Frege held a version of the evaluative view of judgment,” presumably because this would deprive Frege of the ontic reading of “acknowledge,” which is needed to account for the status of truth-values as objects. (214) Textor doesn’t countenance the possibility that Frege meant “acknowledge” in both ontic and evaluative senses. In a footnote, he remarks that “the evaluative understanding of Frege’s ‘anerkennen’ is suggested by Gabriel.” (275) But he doesn’t mention a point Gabriel and others have emphasized, namely that the term “truth-value” (Wahrheitswert) was in fact first used by Windelband, in 1882. Given this fact, it is plausible that Frege had in mind both evaluative and ontic understandings of “acknowledge,” in speaking of judgments as acknowledgments of the truth-value of a thought. If both dimensions are in play we can better understand the need for two truth-values, and no more.

So here, Textor has contributed something fresh to our understanding of Frege with the ontic interpretation of acknowledgment, and a critical engagement with his work can make further advances possible. Another example is provided by his treatment of the concept/object distinction in the last chapter. Here he deploys two ideas: an explanation of the idea of function and argument in terms of the linguistic idea of focus; and the thought that the crucial characteristic of objects is that they can stand in the relation of identity. Both ideas are illuminating. The first helps us to see why different analyses of the same sentence or thought into function and argument do not affect the thought, but only our way of apprehending it; the second helps to explain why the relation of identity plays such a central role in Frege’s thinking. But these two ideas cannot do all the work that Textor wants them to do.

Throughout much of the chapter, Textor eschews Frege’s metaphor of concepts as “unsaturated” or “incomplete,” which seems to be “no longer warranted on Frege’s mature theory that identifies concepts with functions from objects to truth-values.” According to Textor, “the difference between concepts and objects is the distinction between ‘things’ that stand in the relation of identity and those that do not.” (232) However, this difference holds between objects and functions of all kinds: first-level concepts, relations, second-level concepts, and even functions of all levels whose values are not truth-values. To understand Frege’s typed hierarchy of concepts (and more generally functions) it is not enough to point out that only objects can stand in the relation of identity. Textor writes that “the concept paradox is ‘founded in the nature of things’ (namely the nature of concepts; they don’t stand in the relation of identity) and ‘the nature of language’ (namely the semantics of singular terms that connects singular reference and identity).” (256) But the phrase “founded in the nature of things,” which Textor places in quotation marks, comes from the penultimate paragraph of “Function and Concept,” where it refers not to the distinction between object and concept, but to “the difference between first- and second-level functions.” It is this difference which Frege says “is not made arbitrarily, but founded deep in the nature of things.” Textor has no account of the way in which this difference is so founded. It does not depend on the fact that objects alone can stand in the identity
relation. It is instead a matter of the *number and kind of arguments* that functions of different kinds can take—of the distinctive ways in which functions at different levels are "unsaturated."

Textor eventually comes to see a way in which Frege’s metaphor of unsaturatedness can be defended, in a brief discussion of concept-expressions in *Grundgesetze*. (261-2) Here he gets back onto the right interpretive track, in turning to the structure of Frege’s *Begriffsschrift* instead of natural language. Earlier, he had expressed a seeming preference for Frege’s tests for natural-language concept words, such as the presence of the plural and the indefinite article, which he takes to imply that concept-words include such gapless expressions as “a man” and “men.” (231-2) But now he sees how to “defend Frege’s idea” that “an unsaturated sense needs completion in order to exist, whereas a saturated sense does not.” In the end, this this comes down to the fact that “one cannot introduce a concept- or function-designator and explain its sense without using it predicatively within a sentence.” (262) Textor is right to say that “this gets us … pretty close to Frege’s view that the senses of these expressions ‘demand’ completion.” But first, it is unclear how all of this relates to the idea that only objects can stand in the relation of identity (as opposed to any other first-level relation); and second, it would be worthwhile for Textor to discuss how this perspective can explain not only the function/object distinction, but the various distinctions to be drawn among functions, each “founded deep in the nature of things.”

These examples (which could be multiplied) show that there is much to be learned from the exegetical and philosophical arguments in Textor’s book. So it certainly has value for the Frege expert. But now we come to the bad news. Insofar as its primary intended audience is students, I must render a negative judgment. I would not recommend this book to a beginner as an introduction to Frege’s thought. A good deal of the blame for this rests with Routledge. The lack of editorial oversight throughout the book has left it in a state in which reading it and using it is far from painless.

To begin with, the book has many grammatical errors, spelling mistakes, and typographical errors—on average, one every other page. These are not only distracting but can easily lead to lack of understanding and confusion. For this reason alone, I would not recommend this work to a student. I tell my students that grammar, spelling and proper writing are important. It would undercut this message to ask them to read a published secondary work which flouts these standards. Words are misused or misspelled (“settle” for “saddle”—156, 162, 163; “exeget” for “exegete”—123, 129; etc.). There are numerous comma splices (“There is therefore an asymmetry between laws of restricted generality, the arithmetical laws concern all numbers, and laws of unrestricted generality, the laws of logic concern everything,” 34). Words go missing (“… it can proved in one way and not another,” 25), or extra words are present (“I know that I have blood-type A (said on by Peter),” 160). Plural and singular are confused (“Concepts can only be the referents of expression that are not singular in this sense,” 257), subject-verb agreement fails (“The logical operations and symbolism is derivative from the mental operation of conception…,” 66), and tense shifts mid-sentence (“When I answer ‘A man’, I don’t want to ‘pick out’ Hans with my utterance, I wanted to speak of or men-
tion something that subsumes of characterises Hans,” (234). Some sentences are so garbled that they are hard to process—for example, “When do I have judged successfully that the meeting starts now?” (159)

There are also typographical errors that can impede understanding. Discussing Frege’s reasons for rejecting the idea that judgment consists of predicating truth, Textor writes: “But when I infer \( q \) from \( p \), I am not aiming to think the thought that \( q \) is true; that I could do without inference. Intuitively, I want to apprehend the truth of \( q \) via the truth of \( q \).” (212-3) The last “\( q \)” should be a “\( p \).” But a student should not have to figure this out. Similar errors affect Textor’s use of secondary sources. In giving an example from Richard Heck, Textor quotes: “If one does not know that George Orwell is Eric Blair, one cannot think of George Orwell as Eric Blair and yet understand an utterance containing ‘Eric Blair’.” (178) The last “Eric Blair” should instead be “George Orwell.” The error here makes Heck’s point unrecognizable.

A typographical error also seems to be the source of a seeming logical mistake, when Textor offers the following counterexample to a view of sense-identity as provable logical equivalence: “I can establish that the sentence ‘It is raining’ and the sentence ‘If it is not the case that (it is raining and it is not the case that it is snowing), then it is not the case that (it is snowing only if it is not the case that it is raining),’ which is equivalent to ‘It is raining.’”

Textor’s quotations from Frege are also sometimes marred by such mistakes; in one case, this seriously affects the sense of the passage. In a long quotation illustrating the motivation for the sense-reference distinction, we find: “…Wherever the coincidence in reference is not self-evident, we have a difference in sense. Thus the reference of ‘23 + 1’ is also different from the sense of ‘32’ even though the reference is the same, because a special act of recognition is required in order to see this. …” (116-7) The bold-faced text is missing from Textor’s quotation. But it is essential to Frege’s meaning—a special act of recognition is required to see the sameness of reference, not the difference of sense. Again, a student should not have to figure this out.

Frege’s notation for generality is also incorrectly reproduced, and again this may be confusing. Textor quotes Frege’s introduction of the notation in Begriffsschrift: “Let us replace this argument with a German letter, and insert a concavity into the content stroke, and make this same German letter stand over the concavity, e.g. \( \text{I} \leftarrow \text{a} \rightarrow \phi(a) \).” (94) The reader is left to wonder what the “German letter” is (Textor does not explain his use of italics) and where the “concavity” has gone. But at least an explanation is offered. Earlier in the book, Frege’s logical notation for the condi-
tional appears in examples of his logical laws, with no preparation or explanation. (19) This is surely unfriendly to beginners. Textor uses this notation throughout chapter 1, but replaces it with modern notation in chapter 3 without any explanation. (78)

Examples like this can tempt one to think that the book was not written with students in mind at all, in spite of its purpose as a guidebook. Textor sometimes mentions results or arguments that he neither explains nor elaborates, without providing any citation. Discussing the relation between inference and judgment, he notes: “As Lewis Carrol [sic] has shown, one may assent to the conditional ‘If A is true, then B is true’ and ‘A’ and yet not infer B from A.” (79) There is no reference to “What the Tortoise said to Achilles,” and no work by Lewis Carroll in the bibliography. I imagine a student reader, wondering whether to look in Alice’s Adventures in Wonderland or Through the Looking-Glass. Similarly, concerning the concept/object distinction Textor writes: “Before Russell’s discovered [sic] that some concepts don’t have extensions, Frege assumed that every concept had an extension.” (259) But he never mentions or explains Russell’s paradox, and gives no reference from which a student could glean how Russell made his discovery, or what its significance was. The lack of any discussion of the paradox is also felt a few pages earlier, when he proposes that “Frege’s late work suggests a more radical solution” to the problem of the relation between a concept and its extension: “He became sceptical of the idea that there are extensions.” (253) He gives no hint of the grounds of this skepticism, or the crisis precipitated by Russell’s discovery of the inconsistency of Grundgesetze.

Some of Textor’s references to Frege’s works raise similar difficulties. Fregean technical apparatus is again introduced without explanation when Textor illustrates the point that “two words that express the same sense may not be exchangeable salva veritate in indirect speech” with the example: “It may be correct to assent to ‘Dedekind believes that 0 is 0’, while it is incorrect to assent to ‘Dedekind believes that 0 is the extension of the concept equinumerous with the concept ξ≠ξ’, although ‘0’ and ‘the extension of the concept equinumerous with the concept ξ≠ξ’ are synonymous.” (147) Prior to this, Textor has given no statement or explanation of Frege’s analysis of the numbers as extensions of concepts, and a beginning reader will have no way to understand the example. The problem is compounded by a typographical error on the next page: “If Dedekind has only a partial grasp of the sense expressed by ‘1’ he might not assent to ‘1 is the extension of the concept equinumerous with the concept ξ≠ξ’. (148) Here ‘1’ should be ‘0’, but a reader with a shaky grasp on the preceding sentences may not even notice.

Above, we saw that Textor’s quotations from Frege are not always accurate. But although they are, thankfully, usually correct, even then his use of them can be misleading. At the end of chapter 3, for example, attempting to explain Frege’s appeal to the “unsaturatedness” of concepts, Textor raises a problem for the unity of the “circumstances” which play the role of content in Frege’s early work. He provides a quotation to show that “Frege brings unsaturatedness to bear on this question,” and summarizes the lesson of the passage as follows: “Something can only be a circumstance if it contains at least one unsaturated concept. But this gives us only a
necessary condition for the unity of a circumstance. As far as I know Frege never completed this proposal. In his later work he will dispense with circumstances and the problem of the unity of circumstances disappears.” (101)

However, the passage that Textor quotes is actually from a late piece, “On Schoenflies: Die Logischen Paradoxien der Mengenlehre,” written no earlier than 1906! It has nothing to do with the “unity of circumstances,” and Textor provides no evidence that Frege ever discussed such a problem. The text he does give is explicitly about the need for something unsaturated in the realm of reference (Bedeutung). In fact, it provides a late Fregean argument for unsaturated-ness as a mark of concepts, which could have been discussed in chapter 7.

Another example weakens the final paragraph of the entire book. Here, Textor raises a supposed difficulty for Frege’s views on concepts which again derives from misleading and selective quotation. He writes: “one cannot say that a concept-word refers to at most one concept if, and only if, it refers to a concept F and every concept it refers to has the same extension as F. For different concepts can have the same extension. As far as I know he has not tackled this difficulty for his theory of concept-word reference.” (266) The seemingly non-Fregean thought that “different concepts can have the same extension” is derived from a passage 20 pages earlier in which Textor claimed: “Frege has not given us a criterion for deciding whether a concept is the same as ‘another’. For example, in FA (§69, 1) he is clear about that [sic] different concepts can have the same extension and he is happy to leave the matter there.” (247) He is referring to a footnote to §68 (not §69) of the Foundations of Arithmetic, in which Frege comments on his proposed definition of numbers as extensions of concepts: “I believe that for ‘extension of the concept’ we could write simply ‘concept’.” Frege raises two objections to this suggestion, the second of which is (in Austin’s translation) “that concepts can have identical extensions without themselves coinciding” –“dass Begriffe von gleicher Umfänge sein können, ohne zusammenzufallen.” This is what Textor renders (not inaccurately) as “different concepts can have the same extension.” But Frege does not just “leave the matter there,” but adds “I am, as it happens, convinced that both these objections can be met; but to do this would take us too far afield for present purposes.” For all we can tell from this, Frege’s way to meet the second objection might involve denying the claim Textor cites. Frege would clearly go this way later, after identifying concepts with functions from objects to truth-values.

In consequence, Textor’s book ends with a worry generated by a confused misuse of a quotation. This points to a further weakness of the book, especially as a guidebook for students. Through the middle of chapter 4, the book has a strong narrative arc. Each of chapters 1, 2, and 3 ends with a nice summary setting up the work of the subsequent chapter. But after his careful analysis of the opening of “On Sense and Reference” in the first half of chapter 4, the book begins to lose its narrative thread. The second half of chapter 4 deals with a number of interesting issues, as does each of the subsequent chapters. But each of these chapters ends with a whimper, not a bang. Chapters 4, 6, and 7 all close by admitting defeat for an important aspect of the Fregean project—chapter 4 with “Fregeans… seem to face a choice between giving up the the-
ory of partially grasping a sense and the theory of sense and reference itself” (148); chapter 6 with “Perhaps we ought to refer with sentences to truth-values, but we don’t do it” (226); and chapter 7 with “I will have to leave the discussion of this problem [of concept-identity] for another occasion.” (266) Chapter 5 is the exception, but not because it concludes with a clear statement of the results achieved; it simply closes with a quotation from Frege summing up the last issue discussed, the status of sentences in indirect discourse.

The result is that by the end of the book, the reader can begin to feel as if Frege’s whole project was a sequence of failures, and to wonder why so much time has been spent in trying to understand and defend it. This is reinforced by the lack of an overall conclusion. There is a real need to summarize and weigh up the results achieved in the book, both positive and negative. This is especially important for a guidebook intended for students. This guide would seem to lead into the middle of a swamp where one is left without a compass. And that is not a happy place for a guidebook to take a beginner.

In consequence, although as I have shown in the first part of this review, the book contains many valuable insights into Frege’s thought, and the specialist can benefit a great deal from engagement with Textor’s arguments, judged as the Guidebook it is supposed to be it is not a success. This is unfortunate; I would have liked to give the book a stronger recommendation. I have benefited from reading it; and I hope that in spite of its flaws, the interesting interpretations and arguments in the book can still receive the attention and discussion that they deserve.

Michael Kremer
Department of Philosophy
University of Chicago
Chicago, IL
kremer@uchicago.edu