

JOHN PERRY *Frege's Detour. An Essay on Meaning, Reference, and Truth.*
Oxford: Oxford University Press, 2019, pp. 148. ISBN 978–0–19–881282–1

reviewed by

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THIS BOOK IS FASCINATING for two simple reasons. First, it is a detective story. We have a killer, Frege, who, at a certain point, killed the concept of “circumstance” which he used in his first work. How did he execute the killing? And is it a real death or may we still recover the supposedly dead concept? Second, we are witnessing a fight where on one side Perry tries to put Frege’s views inside his own framework, and on the other we have Frege’s framework trying, with some updating, to incorporate Perry’s views. Who is incorporating whom remains unclear, also given that, normally, the living philosopher has the last word, notwithstanding the power of the deceased.

In the book we find occasional misprints and misunderstandings: the idea that Frege refers to definite descriptions when speaking of “Morning Star” while the German “Morgenstern” is a *proper* “proper name”, where the connotation is not relevant, but the historic or causal chain of communication is. But these small details do not alter the well-organized argument. With levity, and leaving irrelevant details aside, Perry tries to illustrate points Frege makes and points he himself wants to make (p. 28; subsequent page references with no author and date are from the book under discussion).

Perry's main strategy

Perry lists four shortcomings of Frege’s work which he intends to overcome:

- (A) The content of a sentence, basically its truth-conditions, can be captured by a unique proposition.
- (B) This proposition is the cognitive significance of the sentence. It is what is said and what is believed.
- (C) Such propositions are the denotations of that-clauses in indirect discourse and attitude reports.
- (D) Beliefs (and other attitudes) are relations to propositions.

With great mastery Perry gives a clear presentation of the main tenets of the revolution Frege introduced in logics (pp. 13–21) before getting to the point: the problem of the role of circumstances as part of the conceptual content in the

Begriffsschrift (pp. 34 ff.). Instead of considering the treatment of identity in the *Begriffsschrift* (hereafter referred to as *Bg*) as a “product of an ‘immature’ phase” of Frege’s career, as Dummett thought, he proposes to elaborate on this concept. But Perry’s proposal is very different from the “unsuccessful dig”, as Dummett dubbed Baker and Hacker’s *Logical Excavations*. Contrary to Baker and Hacker, Perry’s basic proposal is not to reject the last Fregean conception of sense and reference in favour of the “original” Frege, but to find a compromise between the two. And the core is to recover and develop the original idea of “circumstance” by developing a view that appears more Wittgensteinian than it seems.

Perry, Wittgenstein’s Tractatus and identity in the Begriffsschrift

Actually Perry mentions Wittgenstein only to refer to his criticism of Russell (where he stands with Russell) and that he went to Cornell to study Wittgenstein but was drawn to studying Frege instead. Perry’s basic criticism is that Frege’s suggestion that sentences refer to truth-values is a detour and we have to come back to the idea that sentences refer to circumstances, as hinted at in *Bg*. Wittgenstein would probably not agree because for him, in the *Tractatus*, sentences do not properly refer (only names have reference). But he is with Perry in denying that sentences are names of truth-values, and in distinguishing states of affairs and facts. For Perry, “circumstance” stands ambiguously between “fact” and “state of affair”. Following Fine’s distinction between an empirical and a structuralist conception of circumstances, Perry distinguishes circumstances as “happenings” (facts) and as “states of affairs”. While Wittgenstein says that “the world is the totality of facts” (*Tractatus* 1.1), Perry says that “reality consists of happenings” (p. 23). While Wittgenstein says that “a fact is the obtaining (*Bestehen*) of states of affairs” (*Tractatus* 2), Perry certainly agrees, but gives a more detailed presentation of states of affairs as a central concept in his proposal:

Humans think of and describe what happens mainly in terms of uniformities across happenings: objects, properties, locations, and times. States of affairs and other possibilities are an adjunct to this very basic conceptual equipment. They are abstract objects individuated by properties, objects, times, and locations. (p. 23)

What is original in Frege – lost in Wittgenstein and recovered in Perry – is the idea of “carving up” content in different ways. Perry refers to *Foundations of Arithmetic* §64 with the example of “line *a* is parallel to line *b*” as expressing the same content as “the direction of *a* is identical to the direction of *b*”. Carving the same content in different ways is a tool to create new concepts (in this case the concept of direction). But already in *Bg* there are different examples of carving the same content in different ways, as for instance “the Greeks defeated the Persians at Platea” and “the Persians were defeated by the Greeks at Platea” (*Bg*

§3). In this case the same circumstance, that of the Greeks having defeated the Persians, can be presented in different ways. Frege's main idea in *Bg* is that the subject matter of a sentence, what the sentence is about, is relevant and not obliterated as happens in Frege's later view of sentences as names of truth-values. The problem with the later detour is that circumstances disappear when the conceptual content is divided into sense and reference (or sense and denotation).

Frege used the above example of Persians and Greeks to remind us that the distinction between subject and predicate is a grammatical distinction that is not relevant to logic. The logical criterion of identity of content only requires that two sentences have the same conceptual content iff we may derive the same consequences. But it is exactly this point that creates a challenge that Perry calls "the name problem" relating to the most famous pair of sentences:

- (1) Hesperus = Hesperus.
- (2) Hesperus = Phosphorus.

Both names refer to Venus and therefore the two sentences refer to the same circumstance. But from them we cannot derive the same consequences. From we may derive:

- (3) Hesperus and Phosphorus refer to the same thing.

But we cannot derive (3) from (1). Therefore, they do not have the same conceptual content, if conceptual content is to be identified with circumstances. This and other similar problems lead Frege to avoid the identity sign ("=") and to invent a new sign for the identity of conceptual content " \equiv ". This solution seems to solve such kinds of problems. In fact:

- (2*) Hesperus \equiv Phosphorus.

(with " \equiv " instead of "=") expresses "the circumstance that two names have the same content" (*Bg* 8), but also that the two names express two different ways of determination of the same content. Therefore (2*) is a *statement about names*. Analogously:

- (1*) Hesperus \equiv Hesperus.

is a statement about the name "Hesperus", but there is only a way of determination; therefore the circumstances of (1*) and (2*) are not the same.

Problem solved.

The problem with the Begriffsschrift sign of identity

However, with " \equiv " we have to accept a double use of the signs of a conceptual notation: while in an assertion of identity of content with " \equiv " the signs stand for

themselves, in a normal predication, like “Hesperus is a planet”, the sign “Hesperus” stands for the object it denotes. The conclusion is that we have to accept a “bifurcation of the meaning of all signs: they stand at times for their content, at times for themselves” (*Bg* 8).

There are different shortcomings following from this solution. One problem, not discussed by Perry, is that this bifurcation makes logical treatment of mixed formulae almost impossible. The real problem is therefore a logical one, as already presented by Caton (1976), and concerns formulas like the Leibniz Principle of the indiscernibility of identicals (formula 57 *Bg*):

$$(4) \quad (a \equiv b) \rightarrow (f(a) \leftrightarrow f(b))$$

Leaving Leibniz’s interpretation aside, we might claim that in Frege it is just a principle of substitutivity that only concerns signs. However, the expression “ $f(a)$ ” seems to present a typical case where a sign stands for its content and not for itself. We find analogous problems in other “mixed” theorems: how can we understand theorem 53 of *Bg*?

$$(5) \quad \text{If } F(a) \text{ and } a \equiv b \text{ then } F(b) \text{ (theorem 53 } Bg)$$

Again, in “ $F(a)$ ” and “ $F(b)$ ”, “ a ” and “ b ” are supposed to stand for their contents, but in “ $a \equiv b$ ” signs stand for themselves. How can we connect a sign standing for itself with the same sign standing for a denotation? And, worse, from theorem 58 ($\forall x Fx \rightarrow Fz$), by substituting “ F ” with “ $\equiv y$ ” we may deduce:

$$(6) \quad \forall x (x \equiv y) \rightarrow (z \equiv y)$$

This formula is particularly worrisome because we have an “ x ” as an argument of an identity relation, therefore standing for itself, and an “ x ” that is a variable and it is bound to the “ x ” inside the identity sign. But it is incorrect to speak of a variable standing for itself (Caton, 1976, p. 75), as Dummett (1973, p. 544) had already envisaged: *Begriffsschrift*’s view of identity “makes nonsense of the use of bound variables on either side of the sign of identity”. These problems probably made the solution of *Bg* difficult for Frege to digest and therefore required a new solution, together with the abandonment of the notion of “identity of content”.

Perry avoids explicitly treating these logical problems and therefore risks missing one of the main motivations to abandon the old paradigm to introduce a new one: the distinction of sense and reference solves the logical problems posed by the bifurcation. However, Perry presents a novel analysis, which brings to light another aspect of the problems stemming from the *Begriffsschrift*’s solution of the names problem.

Perry's analysis of Frege's criticism of Begriffsschrift

Perry presented the *motivation* for the introduction of a special identity sign in *Bg* §8: the need to answer the name problem discussed above with the examples (1)–(3) and (1*)–(2*). This need might also explain Frege's later insistence in referring to the theory of *Bg* as positing identity as a relation between names. Frege's most famous argument for dismantling the *Begriffsschrift* solution is what Evans (1982, pp. 18–19) calls the “criterion of intuitive difference”. The criterion of intuitive difference of thoughts is first presented in *Function and Concept*. Let us use Perry's simplified examples:

- (7) “Hesperus is moonless”.
- (8) “Phosphorus is moonless”.

(7) and (8) express two different thoughts because someone who does not know that Hesperus is Phosphorus “might regard one as true and the other as false”. The two sentences certainly refer to the same circumstance, and no identity sign is used. If circumstances are the contents of sentences, (7) and (8) should refer to the same consequences, but they do not. From the first I can logically derive “if a planet has any moons, it is not Hesperus”; but I cannot make the same derivation from the second sentence. They represent the same circumstance and yet we cannot say they have the same conceptual content because from them we cannot derive the same consequences. The *Begriffsschrift* solution of the identity problem was needed to save the idea that the same content must give the same consequences. But if we maintain the idea that a sentence refers to a circumstance, we cannot keep the idea of “same content - same consequences”: the criterion of identity of content fails even with sentences that do not contain the identity sign. Therefore, the *Begriffsschrift* solution does not work, even independently of the problem of the identity sign.

This is the story up to now. But Perry wants to salvage the idea of content as circumstance. How can he overcome this shortcoming of Frege's early identification of contents with circumstances?

Thoughts and higher-level circumstances

There is a simple path that Frege was unable to follow. In fact, assuming that sentences refer to circumstances, Frege realized that circumstances did not capture everything necessary to understand truth conditions and cognitive significance (Perry, p. 38) and he abandoned them. Once shown that thoughts, or senses of a sentence, may give the cognitive feature that the *Begriffsschrift*'s circumstances cannot give, Frege forgot circumstances. The argument behind his abandonment is the so-called “slingshot”, about which there is considerable literature including its dismantling presented in Perry and Barwise (1983). The novelty of the present

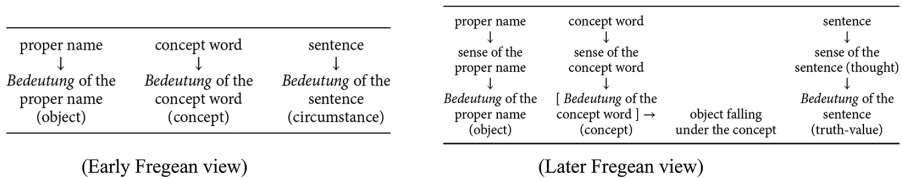
text is that the weakness of the slingshot is shown through an analysis of different levels of truth conditions.

But Perry’s main point in this book is that abandoning circumstances is not necessary even from Frege’s view. Fregean thoughts deal with *how we think of something* (e.g., Venus as the first planet appearing at night). Thoughts cannot be considered to express the *basic* circumstances (such as Venus being moonless), but they may be considered as expressing *higher-level circumstances*, which deal with truth conditions and cognitive significance. Perry calls these higher-level circumstances “property structures”. The sense of (7) or the thought expressed by (7) should be “that there is a unique object that is the first planet to appear in the evening sky and it is moonless” (Perry, p. 43). The strategy used by Perry to recover circumstances is to refresh Frege’s later view, abandoning not only the slingshot, but also the stereotype of Frege’s sense as given by definite descriptions. Let us see how.

Fregean senses

First, Fregean senses, Perry claims, cannot be reduced to definite descriptions. He refers to the very interesting work of Macbeth (2005), but he could probably also have used Recanati’s “nonlinguistic modes of presentation”, which rest on acquaintance relations to objects in the environment (Recanati, 2012, 2013). Certainly there might be space in Frege for a definition of sense more similar to the idea of causal or historical chain, but Frege did not develop it. Kripke did. However, we find in Frege suggestions that are also compatible with a causal theory of reference (like the example presented in Frege’s letter to Jourdain, where the senses of proper names of the same mountain, Afla and Ateb, are given by different chains of communication). Abstaining from enclosing Frege in the “descriptivist view” is certainly a merit of Perry’s analysis.

Second, Perry’s comparison between the *Begriffsschrift* and Frege’s latest views, using the two diagrams below, works on the asymmetry of the second diagram.



The second diagram, representing the view held after the *Begriffsschrift*, has provoked wide discussion among scholars, at least starting from Wiggins (1984), who begins his paper with the original handwritten copy of the diagram. We immediately see the peculiar status of predicates (concept words) where there is a further

distinction, beyond the one between sense and reference. Why then should we not also apply the three-sided aspect of predicates to sentences, to recover a role for circumstances that were thrown away with the “slingshot”? With the distinction between intension and extension, Carnap once recovered the symmetry among the different levels of expressions, cutting away the Fregean tripartite organization of predicates. On the contrary Perry recovers the symmetry, extending the tripartite organization of predicates to proper names and sentences as well.

Distinguishing sense, reference and extension: the recovering of circumstances

Perry recovers circumstances not only through criticism of the slingshot. He also uses the footnote in “Sense and Reference” where Frege says that we may tolerate different people attaching different senses to the same name, because what counts is that they refer to the same person. In other words, we may have different senses, fine-grained thoughts, but agree on certain circumstances. In the example, if *a* thinks of Aristotle as “teacher of Alexander” and *b* thinks of Aristotle as “pupil of Plato” their communication works if they refer to the same person and therefore to the same circumstances in which Aristotle happens to be discussed (Perry, pp. 66–67).

And here we are! Circumstances *de facto* come back. Circumstances still have a role in Frege’s framework. True, circumstances, as we have seen, do not capture the difference in cognitive significance between “Hesperus is moonless” and “Phosphorus is moonless”; the two sentences express *two different thoughts*, but the two thoughts are *about* the same circumstance. Therefore, then, circumstances may fill the role of referents of sentences completing the post-*Begriffsschrift* diagram along the lines of the tripartite distinction of predicates with sense, reference and extension. If circumstances take the place of referents of sentences, truth-values just become the extensions of sentences, as in the following chart, which appears to be the drive behind Perry’s attempt to make Frege’s ideas coherent with his basic views on different levels of truth conditions:

Expression	proper name	description	predicate	sentence
	↓	↓	↓	↓
Sense	sense of the proper name	sense of the description	sense of the predicate	sense of the sentence (Thought)
	↓	↓	↓	↓
Reference	reference of proper name (object)	reference of description (property)	reference of predicate. (property)	reference of sentence (Instantiation of Thought: (lower level Thought or circumstance))
	↓	↓	↓	↓
Extension	extension of proper name (object)	extension of description (course of values)	extension of predicate (course of values)	extension of sentence (truth-value)

Layers of truth conditions: thoughts and circumstances

This suggestion to complete the Fregean schema is strengthened by Perry's basic idea of different layers of truth conditions, saving the *Bg*'s notion of circumstances as contents of sentences. Let us go back to our examples:

(7) Hesperus is moonless.

Under what conditions is (7) true? For the *Bg* (7) is true if (7*) holds:

(7*) There is an x , such that "Hesperus" refers to x , and x is moonless.

But, given that "Hesperus" refers to Venus, (7) is true if and only if (7**) holds:

(7**) Venus is moonless.

Perry says that while truth conditions of (7*) concern the name "Hesperus", truth conditions of (7**) concern the planet. In order to understand the actual truth condition of "Hesperus is moonless" (that is true *iff* Hesperus is moonless) I have to understand at the same time that "There is an x , such that 'Hesperus' refers to x , and x is moonless". It is Perry's idea of *reflexive* truth conditions. In a similar way, Perry continues, when my grandchild hears "you will enjoy the kale", part of what he learns is that there is an x , such that "kale" refers to x , and x is enjoyable (and it is probably false for him, as suggested by Perry at pp. 75–76).

This example clarifies that there is always a correspondence between using a term to refer to something and mentioning that term. Therefore, we have to bear in mind two different levels of truth conditions and two different propositional contents. The assumption that in semantics we only have a unique content that should account for truth conditions and cognitive aspects does not take into account the different levels of truth conditions we entertain while we try to understand a sentence. Identity statements such as "Hesperus is Phosphorus" do not have the purpose of informing us of the circumstance that Venus is self-identical, but to provide the information that "Hesperus" is a name for "Phosphorus". Undeniably it also represents the situation of self-identity, but, as Perry remarks, "no mechanism special to identity sentences that transports us from "=" to "≡" is involved" (p. 78). If a child has no idea what Venus is, from "Venus is moonless" he learns that there is something to which "Venus" refers and that this thing has the property of being moonless. He learns the *reflexive* truth conditions, the truth conditions of the sentence itself. He has not yet understood an astronomical truth, which consists of the referential truth conditions, which is the circumstance of

Venus being moonless. But he is beginning to learn. We are all often like that child.

Freeing thoughts from too many commitments

Perry's discussion of belief reports and indirect discourse would require too much space and I only hint at the basic idea, grounded on different levels of truth conditions. The problem again relates to the criticism of the idea of a unique proposition linked to the sentences of our language, and the view that considers thoughts as propositions that are the object of propositional attitudes. But "Thoughts are not required to be the objects of the relations of *saying that* and *believing that*, further unburdening the level of sense. That job falls to circumstances". This point is linked to the problems presented in Kripke's puzzle about belief, also treated in Perry (2013; 2019, ch. 10). Distinguishing thoughts as senses expressed by a sentence, circumstances as referents of sentences and truth-values as extensions of sentences is not only a first step towards freeing Fregean thoughts from the many commitments to which they have been subjected, but also a proposal of convergence between Perry's theory and Fregean views. Having integrated his theory of different layers of truth conditions into a general Fregean schema, Perry may recover what Frege was trying to convey with his earlier views of *Bg*. Perry's basic proposal is also coherent with some trends in the Fregean literature, concerning an oscillation in Frege's writings between a cognitive and a semantic aspect of sense (see Beaney, 1996; Penco, 2003), where the semantic aspect is what gives (referential) truth conditions, while cognitive sense may be presented as different procedures for providing the truth conditions (or what Perry calls "functions in intension").

Thoughts as procedures?

Frege never *explicitly* distinguished these two aspects, but different passages show that Frege's use of the term "thought" reveals this ambiguity, which raises some apparent contradictory statements, like the statement where "Today is F" expresses the same Thought as "Yesterday is F" said on the subsequent day. Certainly, the two thoughts have the same referential truth conditions, and, following Perry, they represent the same circumstance. Yet they have a different cognitive import, they represent different "modes of presentation" of the same day and therefore could not express the same thought (this is why both Dummett, 1991, and Kripke, 2008, thought that Frege just made a mistake here).

There is no single answer that resolves Frege's ambiguity. Perry's answer is based on the distinction between referential and reflexive truth conditions (pp. 119–125). However, if we distinguish semantic and cognitive aspects, we may redesign the many-layers schema mentioned above in a slightly different

way, using standard model theoretical semantics: the level of reference concerns intensions as functions from possible worlds to extensions. The level of cognitive procedures concerns the different ways we may compute a function.

Frege was well aware of the problem when he pointed out that logically equivalent sentences express the same “thought” intended as (referential) truth conditions, while also representing different procedures. It is the problem also presented by Horty (2007) quoted by Perry (p. 87). Frege even hinted at the possibility of a normal form to avoid differences in procedures (in a letter to Husserl in 1906). Distinguishing intensions and procedures would bring more coherence in the Fregean schema. Using the concept of procedure might also help with facing new problems arising for logicians dealing with computer sciences and robotics. Some hints from Frege may reveal a new aspect of different procedures attached to the same function, suggesting an integration of Perry’s conception of a causal role.

Missed circumstances

Perry missed Frege’s later use of the notion of “circumstance” due to the English translations of Frege’s works. Frege stopped using the term *Umstand* (circumstance) after the *Begriffsschrift*, but in his later writings he began to use the term again in the plural form, mainly in some lectures followed by Carnap and in “The Thought”. However, the English editions translate “*Umstände*” as “conditions” (both in the original translation in *Mind* and in Beaney). It is worth reading the passage from “The Thought” quoted by Perry on page 118, with the difference that “*Umstände*” is translated as “circumstances” (emphasis added):

If someone wants to say the same today as he expressed yesterday using the word “today,” he must replace this word with “yesterday.” Although the thought is the same its verbal expression must be different so that the sense, which would otherwise be affected by the differing times of utterance, is readjusted. The case is the same with words like “here” and “there.” In all such cases the mere wording, as it is given in writing, is not the complete expression of the thought, but *the knowledge of certain circumstances* accompanying the utterance, which are used as means of expressing the thought *is needed for its correct apprehension*. The pointing of fingers, hand movements, glances may belong here too. The same utterance containing the word “I” will express different thoughts in the mouths of different men, of which some may be true, others false.

What are the circumstances Frege refers to? Certainly, time and location, but also different kinds of demonstrations, like hand movements and glances. Circumstances, non-linguistic features, belong to the thought, given that they are used as a “means for expressing the thought” together with linguistic expressions. This confirms Perry’s choice of giving relevance to perceptual modes of

presentation and happenings. An indexical can be used without the pointing of fingers but not without some kind of joint attention movement or posture. Glances are a fundamental way to disambiguate demonstratives: if I utter “that man”, the audience often has no means to identify the object I am referring to without watching me, my position in space and my glance or gestures. As “today” and “yesterday”, uttered the day after, represent different procedures to get the same day, so “the man drinking a martini” and “that man” may represent two different procedures to get the same individual. In the first case you follow the referential description; in the second you need to follow the direction of the eyes of the speaker. But “that man”, according to Frege, constitutes what Künne (1992, 2010) calls a “hybrid name”: something built by a linguistic expression and a non-linguistic one (the gaze towards the man). Therefore, contrary to what Perry (2019, p. 38) says, we may consider “that man” as expressing a Fregean mode of presentation. While Frege, as Perry showed us, made a mistake in abandoning the concept of circumstance, he recovered a new dimension of circumstances in intentional shared actions as part of the procedures to fix the reference of our expressions. As Textor (2015, p. 842) remarks, “knowledge of linguistic meaning and understanding the speaker’s use of the circumstances of utterance both contribute to grasping the thought expressed by an utterance of an indexical sentence.” We might say concerning indexicals: no use of circumstances – no proper expression of thoughts. The most abstract thinker became the forerunner of a conception of human communication grounded in physical and intentional actions in common space and time. The use of circumstances in the plural is the key to developing a more complex idea of circumstance that includes gestures and demonstrations. And, at the end of the day, the re-evaluation of circumstance remains a steady result of a new assessment of Frege’s theory of meaning.

Perry’s arguments are deep and challenging; you may disagree, or find different solutions to the same problems, but the application of different levels of truth conditions to Frege’s view stands as a result few scholars can be allowed to dismiss.

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