Russell, Husserl and Frege

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The conventional wisdom about the relationship between Husserl and Frege is that Frege's highly critical review¹⁸ of Husserl's Philosophy of Arithmetic (1891) persuaded Husserl of the error of psychologism and led to the anti-psychologism of Husserl's Logical Investigations (1900–01).¹⁹ Despite a scrupulously fair statement (pp. 8–10) of all the evidence in favour of the received view, Hill's first main contention is that it must be rejected. She argues instead that Husserl was already critical of psychologism before the Philosophy of Arithmetic was published—the psychologism in that book dated from an earlier period and no longer had Husserl's full support even when it was published—and that his anti-psychologism derived from Lotze and Bolzano rather than from Frege. In my opinion she is completely successful in supporting these contentions with a wealth of biographical, historical, philosophical, and bibliographical evidence.

In other respects, however, she seems to me much less successful. She writes quite correctly of the terminological and conceptual confusions which surround all three of her main authors, confusions which have been compounded now by the activities of their translators, and declares it as "one of the principal goals" of her book to "redress this situation" (p. xi). Hill's pursuit of this goal is frustrated by the fact that she does not undertake any detailed clarificatory discussion herself, being content usually to quote her authors who (especially Husserl) often leave us as confused as before: see, e.g., her discussion of "Inhalt" (pp. 105–6), or her much longer treatment of the intension/extension distinction (pp. 106–11), or of "Begriff" and "concept" (pp. 119–41), where she juxtaposes quotations from a wide range of authors. If authors use words confusingly, the confusion is not removed by quoting them.

Occasionally, also, Hill contributes to the confusion in original ways. For example, her discussion of the intension/extension distinction in chapter 6 seems to involve a pervasive conflation of Fregean concepts, contents (Inhalten) and senses. It may or may not be correct to lump all together as intensions (had she given us a clearer account of intensions we might know which), but it is not correct to assume that there are no significant differences among them. This is especially important since her main philosophical claim in the book is that Husserl was quite right to turn his back on extensional logic, and that, although Frege struggled to incorporate intensions in his logic throughout his career, his efforts were unsuccessful. I'm happy to concede the failings of extensional logic, to many of which Hill alludes throughout the book, but I'm less persuaded (and Hill makes no attempt to convince me) that Husserl's later philosophy has much to offer by way of rectification.

Nor am I persuaded, despite Hill's efforts, that Husserl rejected Frege's philosophy on "valid grounds", as Hill claims (p. 43). The fatal flaw in Frege's philosophy was the flaw in his logicism, and that was revealed by Russell's paradox. What Husserl criticized, however, was Frege's treatment of identity (Philosophy of Arithmetic, pp. 104–5). Accordingly, Hill has to find some link between Husserl's criticisms of Frege on identity and Russell's paradox. There is a good deal of waffle on this throughout the book, but Hill offers three arguments on pages 50–1. In what follows "a = b" is assumed to be a true, informative (contingent, a posteriori) identity statement. The three arguments are then:

(i) β is the class of all b's and α the class of all a's. From these conditions and a = b we have a ∈ β. "But a has at least one property that distinguishes it from b: it is in fact not b. It is a. Therefore a ∈ β" (p. 50).

The trouble here is that, since we started off by assuming that a = b, it is simply inconsistent to deny that a is b. It is no surprise, therefore, that from...
inconsistent premises inconsistent conclusions can be derived. Moreover, even if we grant that \( a \neq b \) it does not follow that \( a \notin \beta \), for \( a \) and \( b \) might be two distinct members of \( \beta \).

(ii) Suppose next that \( \alpha \) is the class of all objects having \( n \) predicates and that \( a \) is an object with \( n \) predicates. Thus \( a \in \alpha \). But, since \( "a = b" \) is contingent, "\( b \) necessarily has at least one quality that \( a \) does not have. So \( b \) has at least \( n + 1 \) predicates". By Leibniz’s Law it follows that \( a \) has \( n + 1 \) predicates. Thus \( a \notin \alpha \) (p. 50).

Now if "\( a = b \)" is a contingent identity, \( a \) and \( b \) share all their extensional properties and thus the only property \( b \) could have which \( a \) lacks is an intensional property. But the properties over which the second-order quantifier in Leibniz’s law ranges are extensional—the law fails (for contingent identities) if intensional properties are included. The argument therefore depends upon including intensional predicates when we count the number of predicates \( a \) has (for otherwise \( b \) would have only the properties \( a \) has), but then assumes that the higher-level predicate "\( \text{has } n + 1 \text{ predicates}\)" is covered by Leibniz’s law and is thus purely extensional. It’s hard to see how both these claims could be held consistently, though the argument raises, almost inadvertently, an interesting point about Leibniz’s law and higher-level predicates. Nonetheless, it is nowhere close to Russell’s paradox. Moreover, the conclusion, as stated, once more does not follow from the premises. For \( a \), of course, also has a property that \( b \) does not, namely: the property of not having the property which only \( b \) has.

(iii) The third argument is essentially the second argument restated but with reference to the fact that if \( b \in \alpha \) it must have the defining property of \( \alpha \). “This property demands that \( b \) should have \( n \) predicates” (p. 51). The argument then follows as before with “predicate” replacing “quality” and “\( b \)” replacing “\( a \)”.

Hill’s conclusion is that these contradictions, “once played out”, begin “to look like the contradiction that worried Russell so much” (p. 51). But they do no such thing. The only thing they have in common with Russell’s paradox is the form of their conclusion: \( a \in \alpha \) & \( a \notin \alpha \). None of Hill’s three contradictions is anything like Russell’s paradox; and none of them should give any trouble to Frege.

For a better link between the Russell paradox and identity, Hill makes much of what Frege diagnosed as the problem with the Grundgesetze, namely his Basic Law V. As is well known, Frege in his Appendix on Russell’s paradox in the second volume of the Grundgesetze retracted one half of Basic Law V, in Russellian notation:

\[
(1) \quad \lambda x(\phi x = \psi x) \supset (\lambda x(\phi x \equiv \psi x)).
\]

All this would at least give us a connection between the paradoxes and the identity conditions on classes.

The trouble is that Frege was wrong in thinking that (1) was the root of the problem. The real trouble was the abstraction principle

\[
(2) \quad (\lambda y(y \in \lambda x. \psi x) = \phi y)
\]

from which (1) follows. Frege wanted to amend (2), but in a way we know is inadequate. Frege’s idea was that the antecedent of (1) could hold and the consequent fail for a value \( x_0 \) of \( x \) if \( x_0 \) were the class \( \lambda x \psi x \) itself. Accordingly he proposed replacing (2) by

\[
(3) \quad (\lambda y(y \in \lambda x. \psi x) = \phi y).
\]

This will not work because a contradiction re-emerges in any domain with more than one member, as Quine has shown.20

This does not trouble Hill unduly, because it merely shows the irreparable bankruptcy of Frege’s logicism, for reasons to do with identity which Husserl is supposed to have pointed out. But the case is weak, because Husserl, in criticizing Frege on identity, patentlly had nothing like Russell’s paradox in mind. Nonetheless, it would be interesting if Husserl had found independent grounds for objecting to (1). But nothing of the sort seems to have been the case. What Husserl pointed out is that two distinct properties may yet be co-extensive.21 What Husserl objects to is not (1) but

\[
(4) \quad (x)(\phi x \equiv \psi x) \supset (\lambda x(\phi x = \lambda x(\psi x)).
\]

Even replacing the property abstracts by their extensions (clearly an inappropriate move for Husserl, given his penchant for intensions) gives us, not (1), but its converse. It seems clear that Husserl’s criticisms failed even remotely to hit the most important weakness in Frege’s logicism. Hill claims it “was Basic Law V that was to guarantee [the] transition from concepts to extensions” (p. 119). But the problematic part of it, for Frege, was the part that took us from extensions to concepts.

If there was a flaw in Frege’s (mature) treatment of identity and his

20 “On Frege’s Way Out”, Mind, 64 (1955): 145-59. In fact, Leiniewski had a comparable result in 1938 (see B. Sobociński, “L’Analyse de l’antinomie russellienne par Leśniewski”, Methods, 1 (1946): 429-81); and Russell had a similar result in 1903 (cf. his ms. headed “*12.5 etc.”, RAs 330.010940).

attempt to incorporate intensions (i.e., Fregean senses), it was the one pointed out by Russell in the central argument of "On Denoting" (LK, pp. 48–50). Russell's case for the theory of descriptions (and much else of philosophical importance, including, of course, Frege's theory of sense and reference) stands or falls with this notoriously obscure argument. For Russell, the argument was crucial for rejecting his earlier notion of denoting concepts (PoM, pp. 53–65), and thereby for a significant part of his extensionalisation programme. If Russell was right about this argument, there are serious reasons for thinking Husserl must have been wrong about intensions. Amazingly, since so much of Hill's discussion concerns exactly the notions here at issue (sense, reference, denoting concepts, intensions, extensions, etc.), she does not even mention Russell's argument, let alone attempt seriously to come to grips with it.

Instead, she blames Russell for a good deal of the terminological confusion she hopes to dispel. The charge is frequently made, yet Russell was rather scrupulous in signalling distinctions. He notes, for example, that Frege's distinction between Sinn and Bedeutung is "roughly, though not exactly, equivalent" to his own distinction between a denoting concept and what it denotes (PoM, p. 502; my italics). But Hill does not attempt to diagnose the differences. Instead she tells us "how completely Russell and Frege misunderstood each other on the terminological and conceptual level" (p. 153), blaming Russell, in particular, for lumping "meanings, intensions, images, ideas, sense, and Gedanken all together" (p. 152)—a charge which is patently untrue. She is particularly critical (p. 152) of Russell's failure to distinguish a Fregean Gedanke from a subjective idea—though Russell explicitly recognizes the objectivity of Gedanken (PoM, p. 507).

Unfortunately the sloppiness of her treatment of Russell is evident in her first paragraph, where she has Russell studying Frege's logic before writing The Principles of Mathematics—it was, of course, Peano's logic he studied then. The slip is minor, but indicative. More serious are the following four howlers about the theory of descriptions: (1) on the theory, "a non-referring expression like 'the king of France in 1905' becomes 'there is no thing which is identical with the king of France in 1905' (assuming, of course, that one knows in advance whether or not there was a king of France in 1905)" (p. 153); (2) the theory "represented [Russell's] effort to neutralize the differences between words, things, and meanings-concepts" (p. 154); (3) on the theory "any expression that is short for an object is also short for all the descriptions ... under which the object may be known" (p. 157); (4) by means of the theory "Russell managed artificially to establish the one-to-one relationship between an object and a description" (p. 159). Each of these claims is not merely wrong, but embarrassing.

Hill's historical scholarship on Husserl is thorough and, so far as I can tell, good. But there are important things she misses. For example, there is good prima facie evidence (communicated to me by Craig Burley) for thinking that the change in Frege's treatment of non-referring singular terms such as "Odysseus" from "On Function and Concept" (1892), where they are assigned a conventional reference, to "On Sense and Reference" (1892), where they are not, may have been due to the influence of Frege's intervening study of Husserl. Hill misses this completely and, in general, her book, contrary to her intention, will tend to confirm the impression that logicians have little to learn from phenomenologists.  

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