

**ORIGIN OF RUSSELL'S EARLY THEORY OF
LOGICAL TRUTH AS PURELY GENERAL TRUTH:
BOLZANO, PEIRCE, FREGE, VENN, OR MACCOLL?**

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Who most likely influenced Russell's early theory of logical truth as purely general truth: Bolzano, Peirce, Frege, Venn, or MacColl?

Russell's theory of logical truth as invariance, or as truth under any interpretation, anticipates Alfred Tarski (1936), J. C. C. McKinsey (1945), Rudolf Carnap (1947), Saul Kripke (1980), Joseph Almog (1989), and John Etchemendy (1990), and has antecedents in Bernard Bolzano and John Venn. Russell's theory resembles Bolzano's substitutional account of logical truth, which Etchemendy compares to Tarski's satisfactional account of logical truth (Etchemendy [14, pp. 27-33])¹.

Tarski himself compares his closely related definition of logical consequence to Carnap and to Bolzano (Tarski [52, pp. 413-18, 417 n.+] following H. Scholtz). Russell's theory of what is possible as what is sometimes the case is close to McKinsey [30, p. 83] and Venn [55, p. 40], with roots in Diodorus Cronus and Parmenides.

Russell's fundamental paper on modality, "Necessity and Possibility" (Russell [51]), which Russell read to the Oxford Philosophical Society on October 22, 1905 (Urquhart [54, p. 507]), was not published during his lifetime. It appeared in a volume of the *Collected Papers of Bertrand Russell* only in 1994 (Russell [34]). Had it been published in 1905 as the companion piece to "On Denoting" I believe it was, the course of modal logic — not to mention the course of Russell studies — might well have been different².

¹Etchemendy discusses Bolzano's theory of satisfiability and analytic propositions (Bolzano [5, pp. 193-99]). Bolzano's theory of necessity and possibility is different (Bolzano [5, pp. 255-59]).

²Saul A. Kripke, for example, says in *Naming and Necessity* that not only did Russell have a theory "plainly incompatible with our direct intuitions of rigidity" (Kripke [25, p. 14]), but that one reason for this was that Russell "did not consider modal questions" (Kripke [25, p. 14]). Nicholas Rescher goes further in his article, "Russell and Modal Logic." There he holds that Russell, with his "massive influence" and "deliberately held negative views toward modal conceptions," was almost single-handedly responsible for "the stunted development of modal logic [for]...two