

28. Carnap and Quine

W. V. (“Van”) Quine (1908-2000) was an American philosopher and logician who spent his entire career at Harvard University. He was influenced by Carnap’s work, especially *The Logical Syntax of Language*, and dedicated his magnum opus *Word and Object* to his “teacher and friend” (1960, v). Quine’s central program was to develop a naturalistic orientation to philosophy, which led him to rethink traditional views about truth, justification, meaning, and existence. In addition to *Word and Object*, his major works include *The Roots of Reference* (1973) and *Pursuit of Truth* (1990). Yet he is perhaps best known for his paper “Two Dogmas of Empiricism” (1951a) which argues against several key commitments of the positivist framework. Though Quine’s objections to the analytic-synthetic distinction have contributed to the declining influence of logical empiricism in analytic philosophy, recent scholarship questions the traditional narrative surrounding the Carnap-Quine debate, emphasizing the continuity between their work.

Carnap and Quine first met in Vienna in December 1932, when the latter spent a year in Europe on a Sheldon travelling fellowship. Carnap invited the recently graduated, twenty-three-year-old logician to visit him in Prague and the two spent a few weeks together discussing a draft version of Carnap’s *Syntax* manuscript. These first encounters were the start of a lifelong friendship and a voluminous correspondence (published in Creath 1990). They also significantly impacted Quine’s philosophical development. Before his period in Europe, Quine had been influenced by the works of Bertrand Russell and C. I. Lewis but he had not been satisfied with their views about the nature of logic and philosophy. Carnap’s syntax program, Quine believed, offered a novel solution to these problems. In unpublished notes and letters from this period, Quine wrote that Carnap had found “the way out of the jungle” by claiming that “not only logic and mathematics; but all that is not meaningless in philosophy [...] speaks [...] not of things or ‘reality’ but rather of *syntax*” (cited in Verhaegh 2022). After his return to Harvard, Quine played an important role in promoting Carnap’s work in the United States. He wrote a review of Carnap’s book and gave three lectures on his syntax program to a large crowd of Harvard professors and students (Quine 1934; 1935). Looking back on this period, Quine called the German philosopher his “greatest teacher” (1970, 41).

There is no evidence that Quine’s work influenced Carnap but the philosopher did play an important role in his personal life. After the disturbing political events of March 1933, Carnap was concerned about the rapid spread of fascist ideology among his students and colleagues (Carnap 1963a, 34) and he decided to try and find a position in the United States. Quine’s stories about American academia likely contributed to this decision. Carnap’s diary (published in Damböck 2022) reveals that the two regularly talked about American philosophy, the U.S. political climate, and about his chance of finding a position across the Atlantic. And

after Quine had returned to Harvard, he and some of his colleagues (most notably, Lewis, L. J. Henderson, R. B. Perry, and A. N. Whitehead) actively helped Carnap to get the documents and funds to come to the United States. They campaigned to get Carnap on a list of the world's most distinguished and productive scholars for the Harvard tercentenary committee, which in the end led the university to officially invite the German professor to come to Harvard to receive an honorary degree (Verhaegh 2020, §8). Once in North America, Charles Morris helped Carnap obtain a position at the University of Chicago, where he would be based until 1951 (Limbeck-Lilienau 2010, §2.5; Tuboly 2021; see ch. 5).

In 1940-41, Carnap spent an academic year at Harvard as a visiting professor. Quine had just received tenure and the exiled Alfred Tarski had a small research appointment to bridge the period until he had found a permanent position. During this year, the three regularly got together to discuss logic, science, and philosophy. Carnap's notes of these meetings (published in Frost-Arnold 2013) show that their discussions predominantly focused on the prospects of a finitist-nominalist language of science. The discussions also marked the start of Quine's growing scepticism about the analytic-synthetic distinction. Though Quine did not have a worked out argument against Carnap's view, he and Tarski objected to Carnap's intensional treatment of analyticity in a draft manuscript of *Introduction to Semantics* (1942). In the years following the Harvard meetings, Quine tried to find, without success, a more acceptable definition of analyticity and related concepts such as synonymy and necessity. In letters to Carnap from this period, he argued that any satisfying definition should "make reference to criteria of behavioristic psychology and empirical linguistics" (January 5, 1943, cited in Creath 1990, 298). While Carnap believed that we can simply define a concept by stating rules for its use, Quine thought that even artificially defined concepts have to be grounded in natural language. According to Quine, it is only by having some general "behavioristic explanation of what it means in general to say that a given sound- or script-pattern is analytic" that we can understand what Carnap means when he stipulates which sentences are analytic in his language (Quine to Carnap, May 10, 1943, in Creath 1990, 338).

Scholars disagree about when Quine definitively broke with the analytic-synthetic distinction (e.g. Creath 1990a; Mancosu 2005; Isaac 2005; Frost-Arnold 2011; Verhaegh 2018, ch. 6). Yet, it is undisputed that his first public and systematic repudiation is presented in "Two Dogmas of Empiricism" (1951a). In this paper, Quine provides two arguments against the distinction. The first sections argue that there is no behavioristically acceptable definition of analyticity. Every definition Quine assesses either presupposes another concept lacking an empirical definition or is unacceptably restricted because it only defines analyticity for a single language (though see ch. 68 for a slightly different reading). In the last sections of the paper, Quine argues against the so-called "dogma of reductionism", the view that "every meaningful statement is [...] translatable into a statement about immediate experience" (p. 38). On Quine's view, Carnap needs the analytic-synthetic distinction to solve an age-old problem for empiricism, viz. the problem of how to explain logical and mathematical knowledge. In arguing that logic and mathematics are analytic, Carnap is able to maintain that they are meaningful even if they have no empirical content. According to Quine, however, the need for an analytic-synthetic distinction disappears once we dismiss radical reductionism and accept that "the unit of empirical significance is the whole of science" (1951a, 42). Because Quine is convinced that no belief is immune to revision and that is possible to adjust any statement (even logical laws)

in the light of adverse experience, he does not see why Carnap requires a separate theory to account for logical and mathematical truths. Once we drop the dogma of reductionism and see logic and mathematics rather as “meshing with physics and other sciences for the joint implication of observable consequence”, the question of “limiting empirical content to some sentences at the expense of others no longer arises” (1986, 207). Quine’s first argument, in sum, is that the notion of ‘analyticity’ is empirically unacceptable. His second argument is that we do not need analyticity to begin with.

Carnap has responded to Quine’s arguments on several occasions, including “Quine on Analyticity” (1952/1990), “Meaning Postulates (1952), “Meaning and Synonymy in Natural Languages” (1955), and “W. V. Quine on Logical Truth” (1963b). Carnap’s reply to Quine’s second argument is pretty straightforward. He accepts Quine’s thesis that no belief is immune to revision but emphasizes that we ought to distinguish between two types of revisions: changes of theory and changes of meaning. Analytic sentences are revisable but only by changing the rules of the language. His response to Quine’s first argument, however, is more complicated. On the one hand, he denies that he has to provide a behavioristic definition of analyticity. His notion of analyticity is an *explication* and it would be unfair to ask for an exact definition of the explicandum because in “ordinary language [...] words have no clearly defined meaning” (1952/1990, 427). On the other hand, he believes that he *can* provide behavioral criteria for intensional notions such as analyticity. Carnap asks us to imagine two linguists who are investigating an unknown language. One of them concludes that *pferd* means ‘horse’, the other that *pferd* means ‘horse or unicorn’. Because the term unicorn has no extension, the two translations are extensionally equivalent. As a result, extensionalists such as Quine must hold that no response in the language can make a difference in deciding between the two competing interpretations. According to Carnap, however, it is very well possible to establish which translation is correct. If the linguists were to point at a horse and ask native speakers to imagine “a thing like this but having one horn in the middle of the forehead”, they would be able to establish which of the two interpretations is accurate by surveying the natives’ responses (1955, 38). By appealing to translation, in other words, Carnap maintained that it is possible to provide behavioral criteria for intensional concepts. Quine, in turn, replied to Carnap by questioning the determinacy of translation (though cf. Hylton 2007, 198).

The Carnap-Quine debate about analyticity also led to a discussion about ontology. In “Empiricism, Semantics, and Ontology” (1950), Carnap had introduced a distinction between internal and external questions about existence, arguing that we ought to differentiate between internal questions of a theoretical nature (e.g. ‘Are there prime numbers greater than a hundred?’) and external questions of a practical nature (‘Should we adopt a language containing the framework of natural numbers?’). Both types of questions are perfectly legitimate, according to Carnap, but external questions of a theoretical nature (‘Do prime numbers really exist?’) are to be rejected as cognitively meaningless. Quine responds to Carnap’s account in the final section of “Two Dogmas of Empiricism” and in “On Carnap’s Views on Ontology” (1951b), dismissing the distinction between internal-theoretical and external-practical questions because it presupposes the analytic-synthetic distinction (see Ebbs 2019 for a discussion). Though his arguments have sometimes been taken to warrant a return to traditional metaphysics (see Rosen 2014), most scholars nowadays agree that Quine accepted Carnap’s view that external-theoretical questions ought to be dismissed (e.g. Price 2009; Kemp

2006; Morris 2018), even though they disagree about whether Quine believed that those questions are to be dismissed as cognitively *meaningless* (see Hylton 2014; Verhaegh 2018, ch. 3; Smith 2021).

There has been much debate about whether Quine's arguments against Carnap's views were successful (e.g. Alspector-Kelly 2001; Bird 1995; George 2001; Tennant 1994; Yablo 1998). There also has been much discussion about what was exactly at stake. Gary Ebbs (2023) argues that Quine was "more Carnapian than Carnap", showing that his arguments against analyticity rest on commitments he shares with his former teacher (Quine 1994, 227). Richard Creath (1991, 376) proposes that Quine's alternative epistemology "is the core of his real argument against analyticity". Peter Hylton (2021), finally, submits that their disagreement turns on Carnap's principle of tolerance. What all of this more recent work on the Carnap-Quine debate has in common, however, is that it does not only focus on their disagreements. Indeed, much current scholarship on Carnap and Quine tends to emphasize their shared philosophical presuppositions (see also e.g. Laugier 1997; Morris 2023; Ricketts 2009; and Verhaegh 2018, ch. 8). Carnap and Quine both embraced a broadly naturalistic perspective, the method of explication, and a scientific approach to philosophy. Moreover, they both rejected traditional philosophical perspectives on truth, justification, meaning, and existence. Despite his sometimes fierce criticisms of some of Carnap's proposals, Quine seems to have recognized this himself as well. In his "Homage to Rudolf Carnap", Quine admits that even when they disagreed about the details, Carnap was "setting the theme". Quine's philosophical development had always been largely determined by the problems he felt Carnap's position presented (1970, 41).

Literature

- Alspector-Kelly, Marc: On Quine on Carnap on Ontology. In: *Philosophical Studies* 102/1 (2001), 93-122.
- Bird, Graham H.: Carnap and Quine: Internal and external questions. In: *Erkenntnis* 42/1 (1995), 41-64.
- Carnap, Rudolf: *Logische Syntax der Sprache*. Vienna 1934.
- Carnap, Rudolf: *Introduction to Semantics*. Cambridge, Mass. 1942.
- Carnap, Rudolf: Empiricism, Semantics, and Ontology. In: *Revue Internationale de Philosophie* 4/11 (1950), 20-40.
- Carnap, Rudolf: Meaning Postulates. In: *Philosophical Studies* 3/5 (1952), 65-73.
- Carnap, Rudolf: Quine on Analyticity [1952]. In Richard Creath (Ed.): *Dear Carnap, Dear Van*. Berkeley 1990, 427-32.
- Carnap, Rudolf: Meaning and Synonymy in Natural Languages. In: *Philosophical Studies* 6/3 (1952), 33-47.
- Carnap, Rudolf: Intellectual Autobiography [1963a]. In Paul A. Schilpp (Ed.): *The Philosophy of Rudolf Carnap*. La Salle, Ill. 1963, 3-84.
- Carnap, Rudolf: W. V. Quine on Logical Truth [1963b]. In Paul A. Schilpp (Ed.): *The Philosophy of Rudolf Carnap*. La Salle, Ill. 1963, 915-922.
- Creath, Richard (Ed.): *Dear Carnap, Dear Van*. Berkeley 1990.

- Creath, Richard: Introduction [1990a]. In Richard Creath (Ed.): *Dear Carnap, Dear Van*. Berkeley 1990, 2-45.
- Creath, Richard: Every Dogmas Has Its Day. In: *Erkenntnis* 35/1 (1991), 347-89.
- Damböck, Christian (Ed.): *Rudolf Carnap: Tagebücher 1920-1935*. Hamburg 2022.
- Ebbs, Gary: *Carnap, Quine, and Putnam on Methods of Inquiry*. Cambridge 2017.
- Ebbs, Gary: Carnap on Analyticity and Existence: A Clarification, Defense, and Development of Quine's Reading of Carnap's Views on Ontology. In: *Journal for the History of Analytical Philosophy* 7/5 (2019), 1-31.
- Ebbs, Gary: Reading Quine's Claim that Carnap's Term 'Semantical Rule' is Meaningless. In: Sean Morris (Ed.): *The Philosophical Project of Carnap and Quine*. Cambridge 2023, 135-53.
- Frost-Arnold, Greg: Quine's Evolution from ›Carnap's Disciple‹ to the Author of ›Two Dogmas‹. In: *HOPOS: Journal of the International Society for the History of Philosophy of Science* 1/2 (2011), 291-316.
- Frost-Arnold, Greg (Ed.): *Carnap, Tarski, and Quine at Harvard: Conversations on Logic, Mathematics, and Science*. Chicago 2013.
- George, Alexander: On Washing the Fur without Wetting it: Quine, Carnap, and Analyticity. In: *Mind* 109/433 (2000), 1-24.
- Hylton, Peter: *Quine*. New York 2007.
- Hylton, Peter: Significance in Quine. In: *Grazer Philosophische Studien* 89/1 (2014), 113-33.
- Hylton, Peter: Carnap and Quine on Analyticity: The Nature of the Disagreement. In: *Nous* 55/2 (2021), 445-62.
- Isaac, Joel: W. V. Quine and the Origins of Analytic Philosophy in the United States. In: *Modern Intellectual History* 2/2 (2005), 205–34.
- Kemp, Gary: *Quine: A Guide for the Perplexed*. New York 2006.
- Laugier, Sandra: De Quine à Carnap: L'Empirisme logique aujourd'hui. In: *Revue Internationale de Philosophie* 202/1 (1997), 541-555.
- Limbeck-Lilienau, Christoph: Rudolf Carnap und die Philosophie in Amerika. Logischer Empirismus, Pragmatismus, Realismus. In: Friedrich Stadler, F. (Ed.): *Vertreibung: Transformation und Rückkehr der Wissenschaftstheorie..* Vienna 2010, 85-164.
- Mancosu, Paolo: Harvard 1940–1941: Tarski, Carnap and Quine on a Finitistic Language of Mathematics for Science. In: *History and Philosophy of Logic* 26/4 (2005), 327-57.
- Morris, Sean: Carnap and Quine: Analyticity, Naturalism, and the Elimination of Metaphysics. In: *The Monist* 101/4 (2018), 394-416.
- Morris, Sean (Ed.): *The Philosophical Project of Carnap and Quine*. Cambridge 2023.
- Price, Huw: Metaphysics after Carnap: The Ghost who Walks? In David Chalmers, David Manley and Ryan Wasserman (Eds.): *Metametaphysics: New Essays on the Foundations of Ontology*. Oxford 2009, 320-46.
- Quine, W. V.: Lectures on Carnap. In Richard Creath (Ed.): *Dear Carnap, Dear Van*. Berkeley 1990, 46-103.
- Quine, W. V.: Review of ›Logische Syntax der Sprache‹ by Rudolf Carnap. In: *Philosophical Review* 44/4 (1935), 394-397.
- Quine, W. V.: Two Dogmas of Empiricism. In: *Philosophical Review* 60/1 (1951a), 20-43.
- Quine, W. V.: On Carnap's Views on Ontology. In: *Philosophical Studies* 2/5 (1951b), 65-72.

- Quine, W. V.: *Word and Object*. Cambridge, Mass. 1960.
- Quine, W. V.: *Homage to Rudolf Carnap* [1970]. In: W. V. Quine (Ed.): *The Ways of Paradox and Other Essays*. Cambridge, Mass. 1976, 40-43.
- Quine, W. V.: *The Roots of Reference*. La Salle, Ill. 1973.
- Quine, W. V.: *Reply to Geoffrey Hellmann*. In: Lewis E. Hahn and Paul A. Schilpp (Eds.): *The Philosophy of W. V. Quine*. La Salle, Ill. 1986, 206-8.
- Quine, W. V.: *Pursuit of Truth*. Cambridge, Mass. 1990.
- Quine, W. V.: *Exchange between Donald Davidson and W. V. Quine following Davidson's Lecture*. In: *Theoria* 60/3 (1994), 226-31.
- Ricketts, Thomas: *From Tolerance to Reciprocal Containment*. In: Pierre Wagner (Ed.): *Carnap's ›Logical Syntax of Language‹* Houndmills 2009, 217-35.
- Rosen, Gideon: *Quine and the Revival of Metaphysics*. In: Gilbert Harman and Ernie Lepore (Eds.): *A Companion to W. V. O. Quine*. Malden, Mass. 2014, 552-70.
- Schilpp, Paul A. (Ed.): *The Philosophy of Rudolf Carnap*. La Salle, Ill. 1963.
- Smith, J. Andrew: *Carnap and Quine on Sense and Nonsense*. In: *Journal for the History of Analytical Philosophy* 9/10 (2021), 1-28.
- Tennant, Neil: *Carnap and Quine*. In: Wesley Salmon and Gideon Wolters (Eds.): *Logic, Language, and the Structure of Scientific Theories*. Pittsburgh 1994, 305-44.
- Tuboly, Adam T.: *To the Icy Slopes in the Melting Pot: Forging Logical Empiricisms in the Context of American Pragmatisms*. In: *HOPOS: Journal of the International Society for the History of Philosophy of Science* 11/1 (2021), 27-71.
- Verhaegh, Sander: *Working from Within: The Nature and Development of Quine's Naturalism*. New York 2018.
- Verhaegh, Sander: *Coming to America: Carnap, Reichenbach, and the Great Intellectual Migration. Part I: Rudolf Carnap*. In: *Journal for the History of Analytical Philosophy* 8/11 (2020), 1-23.
- Verhaegh, Sander: *Carnap and Quine: First Encounters (1933-1936)*. In: Sean Morris (Ed.): *The Philosophical Project of Carnap and Quine*. Cambridge 2023, 11-31.
- Yablo, Stephen: *Does Ontology Rest on a Mistake?* In: *Proceedings of the Aristotelian Society Supplementary Volume* 72/1 (1998), 229-61.

Sander Verhaegh