Richard Newell Boyd, the Susan Linn Sage Professor of Philosophy and Humane Letters Emeritus, died on February 20, 2021 at the age of 78. During his forty-nine years in the Cornell Philosophy Department, Dick was a leading innovator, with worldwide influence, in the philosophy of science, the philosophy of mind and the philosophical study of moral judgment. His engagement in diverse fundamental controversies, with deep appreciation of opposing positions, made him a richly stimulating teacher and colleague. His enthusiastic and supportive presence will be sorely missed by his many friends, who extend their deep sympathy to his wife, Barbara Koslowski, professor emerita of Human Development in the College of Human Ecology, and their son, Christopher.

Dick was born and raised in Arlington, Virginia. He grew up surrounded by people discussing politics, experienced the McCarthy era, and watched his parents stand up for colleagues and friends who had been blacklisted or shunned. He admired his parents for allowing him to play with the son of a reported Communist, even though other children were not allowed to do so, and for allowing him, when he was a teenager, to drive an African American student to a school meeting when Virginia schools were first being integrated. These episodes, along with the conservative political climate in Arlington, fed his interest in political issues and in Marxism. With characteristic energy and engagement, throughout his adult life he joined with others in advocating for progress against racism and the unjust exploitation of workers, and for the end of destructive wars and of American support for oppressive governments, often in opposition to policies of the U.S. government or university administrations.

Dick received his Ph.D. in 1970 from the MIT Philosophy Department, with a dissertation in mathematical logic, preceded by a B.S. from MIT, in 1963, in mathematics. As a graduate student, he developed his abiding interest in the philosophy of science, stimulated by Hilary Putnam, who left MIT for Harvard in 1965. Dick joined him there as a faculty member in 1968, after lectureships at Berkeley and the University of Michigan, and then came to Cornell in 1972.
Dick, together with Hilary Putnam, led a fundamental transformation of the philosophy of science. At the start of their work, the most influential perspective in the philosophy of science denied that scientific research establishes the truth, or approximate truth, of propositions concerning unobservable objects and causal mechanisms, for example, electrons and electromagnetic fields. In this “logical empiricist” view, progress in the development of scientific laws and theories solely consists of increasingly extensive and accurate descriptions of regular associations of observable facts and properties, descriptions that are confirmed by their ability to lead to accurate predictions.

In the contrasting “scientific realist” perspective that Dick advanced, mature sciences have established the existence of unobservable entities and causal mechanisms and, with growing accuracy, approximate truths about them. As in all his work, he deeply appreciated the grains of truth in the position he opposed, which he innovatively integrated into his own perspective. He fully acknowledged the central roles of predictive success and of revision in light of predictive failure in scientific progress. But, he argued, scientific realism is justified as the best explanation of the vast and vastly increasing successes of mature theoretical sciences in observational predictions. These predictions have been based on theories that describe unobservable entities and causal mechanisms. The trajectory of success would be an inexplicable miracle if those descriptions were not approximately and increasingly accurate. Logical empiricists had ingeniously shown how mutually incompatible theories could be constructed to fit any set of data and took the existence of such alternatives to count against scientific realism. In his response, Dick emphasized that beliefs about causal mechanisms based on current theories must play an independent role in the evaluation of alternative explanations of observational success; he argued that similar reliance on beliefs about causes is needed in the central achievement of science according to logical empiricism: the justification of descriptions of regular associations of observable phenomena, continuing into the future. Further scrutinizing the role of observational testing in scientific progress, he noted the frequent conflicts between the current record of observations and the best-established theories; he argued that the assessment of current observations as mismeasurements or as misleading on the basis of current theories of underlying unobservable causal processes has been essential to scientific progress, as judged by logical empiricists as well as by scientific realists. These wide-ranging inquiries into the interaction of theorizing and observation played a leading role in a transformation of the philosophy of science which made scientific realism the mainstream view.

In his influential response to the mind-body problem, Dick deployed the same innovative capacity to accommodate the insight of an opposing view. He was a materialist, who took mental events and processes to be physical events and processes. In his view, an episode of pain is not merely caused by neural events, involving, say, the firing of C-fibers, it is itself a neural phenomenon. But he denied (as a dualist would) that a mental property (say, painfulness) is identical with a physical property. According to his non-reductive materialism, mental properties are realized in physical events and processes but are not identical with properties definable in physical terms. Creatively modifying and reversing the thrust of an influential argument, due to Saul Kripke, in support of dualism, Dick argued that a mental property that is actually always realized in neuro-physiological events of a certain sort nonetheless could conceivably be realized in vastly different events. Through this and other powerful arguments, he again played a leading
role in the transformation of a central philosophical controversy, in which his non-reductive position became the mainstream of materialism.

Dick also played a leading role in a fundamental controversy about moral judgments. Along with his colleagues, Nicholas Sturgeon and Richard Miller, he developed and defended a realist view of moral judgments: A moral judgment is a claim, true or false, that makes reference to a moral property; the evolution of moral judgments in the course of human history and their role in the explanation of social change help to establish the approximate truth of such claims. Dick’s arguments for moral realism extended his insights into the nature of scientific discourse and scientific progress into what had seemed a radically different realm.

Dick’s interventions in general philosophical controversies were always richly informed by the practices of specific sciences, and his general perspectives, in turn, illuminated his explorations of the methods and content of specific sciences, including biology and chemistry. For example, his realism extended to questions about the classification of natural kinds, such as species. Responding to the fact that all members of a species do not share a single set of necessary and sufficient properties, he proposed the notion of homeostatic property clusters, the idea that species and other natural kinds are clusters of typically co-occurring properties that result from and are sustained by homeostatic mechanisms such as gene exchange or the sharing of a common ancestor or a particular ecological niche. Collaboration with his son, Christopher, a chemist, led to work in which they noted that some of the standard generalizations relied on in synthetic chemistry are not strictly accurate but accurate often enough to form a solid basis for hypothesizing (or, more prosaically, guessing). In related work, Dick pointed to an important role that metaphor plays in science: fixing the reference for scientific terms in a non-definitional way, thereby permitting scientists to refer to certain kinds, in spite of a level of ignorance about those kinds that obstructs successful definition. By virtue of such referential abilities, researchers can at least formulate questions to guide research, research which may eventually remedy that ignorance.

Dick’s enthusiasm for philosophical discussion, with appreciation of positions other than his own, made him a stimulating colleague and teacher. Responses to the news of his death by those who knew him were uniformly characterized by gratitude for a genial, insightful interlocutor, as in this representative sample: “In discussion he combined greater penetration, quickness and fluency, along with breadth of knowledge and interests, than anyone else I’ve ever encountered,” (Carl Ginet, professor emeritus in Philosophy); “My single biggest philosophical influence, always generous with his time and penetrating with his comments and criticisms. He was also a wonderful and very animated teacher, buzzing around the room from one board to another, and making quite sophisticated arguments intelligible to undergraduates who had never taken a philosophy class before,” (Philip Gasper, a graduate student of Dick’s, professor at Madison College); “My best memories of my years at Cornell are linked to the conversations – and the arguments – Dick and I had. They got me thinking in new ways, imagining new solutions to problems I had found fairly intractable within my own theoretical frame of reference.”, (Professor Satya Mohanty, Department of Literatures in English).

Dick’s diverse non-academic interests included a life-long interest in cars, which he shared with his brother-in-law. When asked in a high-school awards interview about his hobbies, he replied,
“I drive a very fast Chevy very fast.” His interest in politics was continuous with his interest in history in general. Historical interests led him to collecting antiques, which he regarded as pieces of social history. This diminished slightly after he had a child, and it was replaced by visits to zoos, natural history museums, bookstores, and comic book shops, activities which he embraced with characteristic enthusiasm and enjoyment.

Dick Boyd’s memory is cherished by those whose lives he enriched. His work will be an enduring source of philosophical insight.

Written by Richard Miller and Harold Hodes