

Unfathomed Knowledge, Unmeasured Wealth: On Universities and the Wealth of Nations

William Warren Bartley III

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“Economics and epistemology are fundamentally interrelated, since both are concerned with increase of wealth and governed by many of the same principles. Indeed, the theory of knowledge is a *branch* of economics.” So says William Bartley in the Introduction to *Unfathomed Knowledge, Unmeasured Wealth*. The idea thus expressed has rich implications, explanatory power, and problem-solving potential.

Bartley was a prominent American philosopher who studied with Sir Karl Popper at the London School of Economics as a graduate student. He later became thoroughly familiar with the works of Friedrich A. Hayek, to whom this volume is dedicated. Except for their interest in free inquiry, Popperians have not been particularly identified with market liberal ideas. Conversely, market liberals have not been especially aware of the implications for them of Popper’s work. Bartley’s own previous work has rarely been political, but this book is a powerful defense of liberal ideas. It draws its strength from Bartley’s insights into and creative applications of the philosophical tradition started by Popper, the political and economic tradition begun by Hayek, and from the complex and exciting interplay of these two traditions.

The notion of unfathomability—of never appreciating the full implications of our theories or the full consequences of our actions—is deeply ingrained in the works of both of Bartley’s teachers and predecessors. In Part I of *Unfathomed Knowledge, Unmeasured Wealth*, Bartley introduces and explains what he means by unfathomable knowledge. “There is a radical sense in which the content of existing theories is *inaccessible* in principle even to the creators of the theories and to other experts.” This idea from Popper is closely related to Hayek’s theses about the unintended and unpredictable consequences of our actions. Bartley introduces us to the logical underpinnings of this concept by first recounting Popper’s example of the logical relationship between Einstein’s and Newton’s theories. He then develops and illustrates the idea with a case study involving both the origin and spread of AIDS and AIDS treatments.

The origin of AIDS may well be attributable to “unintended consequences of nightmarish proportions.” Research indicates that the “AIDS epidemic, and the disease itself, may have been created by the 13 year long mass vaccination campaign” conducted by the World Health Organization in its attempt to eradicate smallpox. (New evidence supporting this theory became available in November 1990 with the news that interference with human immune systems caused by other vaccines also correlates highly with HIV-positive results.) On the other hand, AIDS treatment has also benefited from the unintended consequences of developments in seemingly unrelated medical theories. Two of the more effective AIDS treatments were developed from chemical compounds

invented before the discovery of AIDS. As a logical matter, then, the informative content and implications of the medical theories used in constructing those compounds—which include their value as AIDS treatments—(1) were not part of the subjective intention of their inventors and (2) were “*unimaginable*, and therefore unintendable in terms of the information available.”

For Bartley, as for Popper, knowledge, though the product of individuals, becomes independent of and beyond the control of individual human knowers. Marx once complained that “our product . . . outgrows our control, crosses our expectations and nullifies our calculations.” Bartley responds that this is inevitably so, and not just for discrete physical products: “Our autonomous knowledge products escape our control whether we like it or not.”

An epistemologist who understands knowledge in this way sees his task as distinguishing between those traditions and institutions that nurture the growth of knowledge by eliminating error and distortion and those institutions that do the opposite. The epistemologist becomes an ecologist in the sense that Hayek and Adam Smith are ecologists in economics narrowly understood: they identify both what nurtures growth and what retards it.

“To begin to become aware of, and to face, such ecological questions is to begin artificially to construct and to probe possible environments for the advancement of science and learning, to imagine a constitution not only for liberty but for learning.” Where better to start than by looking at our universities? In Part II, Bartley applies his proposed economic analysis to university structures, traditions, and institutions. He comes to three conclusions. First, “the institutions on which we rely most for the production of knowledge . . . if viewed from an economic perspective, are not organized in such a way as readily to advance knowledge, and indeed often work against its growth.” Second, American universities fall far short of offering a free marketplace in ideas. And third, “the chief institutions of contemporary research—especially those connected with faculty hiring, graduate research and the professions—are late feudal in character. . . . They are primarily concerned not with the production of innovative knowledge, but with the control of entry, the gaining of ‘livings,’ the placement of vassals, and the controlled production and protection from competition of noninnovative alleged knowledge.”

University bashing is a popular spectator sport, as evidenced by the impact of works such as Allan Bloom’s *The Closing of the American Mind*, Charles Sykes’ *Profscam: Professors and the Demise of Higher Education*, and Russell Jacoby’s *The Last Intellectuals*. These are important works and they tell important stories. However, Bartley’s thesis about the institutional problems of the university system goes well beyond the analyses offered in these books. Sykes thinks the problem is caused largely by professors seeking their own self-interest in terms of working hours, for instance, while Bloom insists that universities are

failing to transmit received traditions properly, for reasons which non-trivially include the music students listen to.

Bartley, by contrast, focuses on the philosophical justification offered by several prominent scholars for the status quo in our universities. Bartley illuminates the relationship between the doctrines of Thomas Kuhn, a historian of science whose work has been extremely popular among professional academics since its publication almost 30 years ago, and the non-market status quo existing within universities today.

Bartley thus wants Kuhnianism, at least in the inappropriate normative function it has taken on, to be displaced so that the work of reforming our educational and research institutions in the direction of a competitive market can proceed. It is to this end—the critical examination and refutation of Kuhn's ideas and those of one of his intellectual forebears, Ludwig Wittgenstein—that Bartley turns in Part III.

Part III is a case study that illustrates and expands on themes introduced earlier. It is the story of the reception that the professional philosophy community accorded to Karl Popper's ideas. Chapters 9 through 18 contain new biographical information about Popper, his relationship with Bartley, and his philosophical allies and opponents.

Bartley portrays 20th-century philosophy as having two key, but widely divergent, strands. During the 1930s and 1940s, logical positivists proposed to impose on all human knowledge what they viewed as the character and methods of science itself. Since the sciences were growing by stunning leaps and bounds while other disciplines, especially religion and metaphysics, were not, positivists suggested that all disciplines should be transformed and made to conform to what they and many others believed to be the methods of the natural sciences.

In his later work, Wittgenstein made a move analogous to that of the positivists, maintaining that not only can science claim its own way of gaining knowledge, but each discipline can do the same: "Each discipline or field or 'language game' or 'form of life' is alleged to have its own ungrounded ultimate standards or principles or 'logic,' *embedded in action*, which need not conform to or be reducible to any other standards, and which, again, it is the special task of the philosopher to describe and clarify but to eschew judging or defending."

Wittgenstein's approach, taken up with much success by Kuhn, leads to fundamental and irrecoverable *divisions* in knowledge. For these thinkers, each "language game" or "paradigm" is incommensurable with every other one. This move sunders human learning and knowledge as a shared activity or spontaneous order because we are no longer allowed to comment critically on paradigms other than our own. "We" cannot improve or refute "their" ideas, and vice versa.

Bartley believes that it is precisely this feature of Wittgenstein's thought that so charms our professional academic elites. It makes them immune to criticism except from other registered members of their own elite, whose character they are able to control by the guild-like behavior their institutional structure allows and rewards.

Popper, however, viewed the origin of competing theories as irrelevant. Instead he emphasized that it is how and whether we can test and refute or criticize competing theories, and thus improve them, that matters. Thus, Popper's ideas call normatively for a common and commonly accessible approach under which all ideas are subjected to searching criticism. He asks urgently for the development of a constitution of learning that upholds and promotes free inquiry. Such institutional arrangements would produce consequences profoundly favorable for the creation of a free and open society.

To summarize, *Unfathomed Knowledge, Unmeasured Wealth* develops three main arguments. Bartley explores and applies the notion of unfathomable knowledge, a notion that is key to understanding the work of Hayek, among others. He examines the ecological and economic structure of American universities as it affects their behavior, character, and teaching and research outcomes. Finally, Bartley provides a history of two major themes of 20th-century philosophical thought and their differing implications for theories of rationality, the growth of knowledge, and a unified, spontaneously ordered free community of critics, scholars, scientists, and intellectuals.

William Warren Bartley III died in February 1990. He was in the midst of preparing biographies of Hayek and Popper and was the general editor of Hayek's *Collected Works*. Bartley's intimate and masterful understanding of Hayek and Popper is fully displayed in *Unfathomed Knowledge, Unmeasured Wealth*. A striking part of Bill's genius lay in his choice of teachers and in his deep understanding and ability to communicate how their ideas solve important and long-standing problems in philosophy, science, and economics that hinder our movement to a free, just, and humane society. His untimely death was a tragedy for liberals and the community of humane scholars in all fields.

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