7 WARE STREET

LETTERS

What Counts

The things that can be counted, count. That saying enjoys a special currency in certain precincts—in academia, especially among practitioners of many of the quantitative social sciences and the sciences proper. Locally, for those so inclined, the good times are rolling.

At least three converging factors—the advance of new research tools and fields; the easing of fiscal constraints after the Great Recession; and the blessings conferred by The Harvard Campaign—have enabled the University to put forth a trio of bracing intellectual programs, each broad in scope and each broadly quantitative.

The Harvard Data Science Initiative, first out of the chute, in early 2017 (see harvardmag.com/datascience-17), describes itself as being at the intersection of statistics and computer science, but with implications for “almost every empirical scholarly field,” foreseeing applications in “a wide range of practical areas including business and commerce, government and politics, pure and applied science and engineering, medicine and public health, law, education, design,” and, for good measure, “many others.” Medical scientists talk about gathering information from unusually long-surviving cancer patients to identify patterns that lead them to new therapeutically robust, “druggable” genetic targets, and more. Kennedy School professors are examining communication strategies to encourage students to attend school more often (see “Trimming Truancy,” May-June 2018, page 8). And soon. All clearly to the good.

The Quantitative Biology Initiative, organized during 2018, leans more toward basic than applied science—melding life sciences with computation, engineering, and physics to harness enormous sets of data and use them to build models of complex living systems that are not themselves so complex as to be unwieldy and impractical. As illustrations, the initiative describes problems such as understanding “how molecular circuits within cells make decisions, how biological components such as cells and proteins self-assemble to create complex structures including tissues and organs, and how biological systems adapt to changing needs of the environment.” In due course, naturally, there may be important applications, too (“Our goal is to uncover basic principles governing biology, to learn from biology to build novel engineering systems, and to address fundamental questions that have an impact on human health and disease”), but this work seems more clearly anchored in Cambridge, and ultimately Allston, than in the Longwood Medical Area.

Finally, the Harvard Quantum Initiative, a pre-Thanksgiving arrival (read about it at harvardmag.com/quantum-sci-18), aims to meld basic science (from physics) with “solution-driven” engineering, extending to partners in government, industry, and other academic institutions. Superfast quantum computing is a, if not the, holy grail. Astrophysicist Christopher Stubbbs, the new dean of science, lists the two recent initiatives as among his chief priorities.

These programs involve graduate students and postdocs, expanded undergraduate teaching and experiential learning, new multidisciplinary faculty collaborations (and appointments), and more. They appear likely to attract interested students and researchers—and the resources to proceed. Each is likely to yield many exciting discoveries, even if the findings are not always immediately accessible to laypeople from other fields.

It is not churlish to note, at the same time, that the equivalent ambition is somewhat lacking, or at least less readily apparent, within the arts and humanities. The University has invested heavily in the wholesale remaking of the Harvard Art Museums as a teaching instrument, with excellent results, and has broadened undergraduate learning opportunities—but neither constitutes a similarly exciting point of intellectual or interdisciplinary departure. There is a smattering of interesting work in digital humanities, but many scholars regard that as a useful toolkit, not a breakthrough. To the extent that the humanities disciplines appear to have difficulty aligning on a similar, galvanizing Big Idea—well, that’s the problem with the humanities, many people seem to think.

Nor is it new: in his remarks upon the dedication of the Barker Center, in 1997, then-president Neil L. Rudenstine (himself a literature scholar in good standing) commented: “[M]any of the discussions and debates of the past few decades—even at their most disputatious—have significantly broadened and deepened our ideas about human nature and experience in extraordinary ways,” he said. “We know much more about the human past—and present; about the values, the ways of life, and the art of people in a far greater number of societies; and about individuals and groups whose very existence, and whose contributions, were often overlooked and certainly underestimated,” a set of accomplishments that represent “a major achievement” realized through “real struggle, debate, and disagreement”: the generative forces of new ideas. At the same time, Rudenstine worried that “The best work of the past 20 to 30 years is already well established....We can begin to consider which courses, curricula, and research might prove to be most fruitful in the next few decades.”

What seemed true then seems so now. The stakes in the humanities are more important than ever. It won’t do to let matters languish. Harvard retains formidable resources—in its faculty members, libraries, collections, and students—in the humanities. Scholars in these disciplines appreciate and are excited about the advances in the sciences, and should neither feel, nor be inadvertently left to feel, overlooked. The University and its supporters, presented with exciting paths to new work in the humanities, will no doubt rally to the cause.

And by the way, that saying up top, about things being counted? It is a weird recasting of the original “Not everything that counts can be counted, and not everything that can be counted counts,” and is often attributed to Albert Einstein. That attribution is wrong, as a rudimentary textual sleuthing reveals—the kind of work at which humanities scholars excel. You could look it up.

John S. Rosenberg, Editor