Cambridge 02138

Social science, diversity, harpsichords, divestment, hemlocks

DEBATING DISRUPTION

IT IS REMARKABLE that your encomium to the “Disruptive Genius” of Professor Clayton Christensen, and his theory of “disruptive innovation” (July-August, page 38), appeared at almost the same time as a scathing critique of the historical underpinnings of that theory by Professor Jill Lepore appeared in the June 23 issue of The New Yorker.

Lepore delivers what appears to be a devastating analysis of both the theory and factual foundation for Christensen’s “Gospel” of disruptive innovation.

Lepore calls the theory of disruptive innovation a theory of history “founded on shaky evidence” that has been “subject to little serious criticism.” Perhaps her most damning criticism is that “Historical analy-

7 WARE STREET

Is Harvard Cool?


In an Internet era, Stanford is in a sweet spot. One-quarter of its undergraduates earn computer-science or engineering degrees, the Times reported. Its president has thrived in that field (and serves on the Google and Cisco boards). There is the siren song of Silicon Valley—center of perhaps the greatest wealth-creation in history. People prefer the climate, earthquakes, perhaps the greatest wealth-creation in history. People prefer the climate, earthquakes

That said, Stanford—more than Harvard and other institutions—suffers from a divide between “techies” and “fuzzies” (humanities students). And the world may become oversaturated with apps.

Cambridge and Palo Alto are not a competitive duopoly. But Harvard administrators do seem to have Stanford in mind. “Innovation” is constantly invoked—and backed tangibly by the iLab and recurrent grant competitions underwritten by the University. Venture capitalist James Breyer (a Stanford undergraduate with a Harvard M.B.A. and deep ties to technology and new media) has been elected to the Corporation. The marquee capital-campaign priority is engineering and applied sciences.

Senior officials also bemoan the perception that Harvard, rooted in the Northeast, is “old and cold.” Perhaps partly in response to surveys showing that Harvard students are less happy about their experiences than those elsewhere (including Stanford), resources have flowed into “common spaces”: the Yard’s colorful chairs, the Science Center Plaza (which has yet to attain the status of Stanford’s White Plaza as a crossroads for student life).

Introducing Drew Faust on May 29, Harvard Alumni Association leader Kate Gellert said, “Harvard’s twenty-first president, Charles W. Eliot, in his inaugural address, 145 years ago, said, ‘The inertia of a massive university is formidable. A good past is positively dangerous if it makes us content with the present and thus unprepared for the future.’”

Harvard is not mired in inertia. Its leaders are pursuing improvements in pedagogy, research, and the student experience. As it builds applied-science expertise, it maintains strengths in the search for meaning and value—one of Faust’s themes, and more important long term than an app for scoring the best local taco. Stanford nonetheless has real momentum, winning students and recruiting professors. Is Harvard (still) cool? Sure. But Stanford is hot. ~John S. Rosenberg, Editor
snores proceeds from certain conditions regarding proof. None of these conditions have been met [by disruptive innovation].” Lepore deconstructs Christensen’s paradigmatic case of disk drives and the fate of Seagate Technologies. She concludes that, quite contrary to the theory of disruptive innovation, “victory in the disk-drive industry appears to have gone to the manufacturers that were good at incremental improvements, whether or not they were the first to market the disruptive new format. Companies that were quick to release a new product but not skilled at tinkering have tended to flame out.”

It would be interesting and informative for Harvard Magazine readers if you initiated a conversation between Lepore and Christensen to explore these questions further.

David A. Drachslcr, LL.B. ’68
Alexandria, Va.


Clayton Christensen replies: CPS, located in Norton, Massachusetts, has become quite successful in the niche market of advanced ceramics. The other companies, while they continue to have success, no longer are in the advanced ceramics space. We didn’t have the theory of disruption when we created CPS. If we had, the advanced ceramics that CPS created would have been a sustaining innovation and the theory would say that it would have failed. So that fact that it survived was a miracle!

Craig Lambert suggests Christensen’s company, Ceramics Process Systems, “succeeded,” outsmarting DuPont, Alcoa, and Hoechst. Not so. I invested in CPS’s IPO, and so watched as the company promptly crumbled, despite having been promoted to investors as can’t-miss technology with leadership from a Rhodes Scholar, Baker Scholar, White House Fellow, a tall man with youth on his side. CPS is gone. DuPont and Alcoa live on, while Hoechst became part of what is now Sanofi.

Dundas I. Flaherty, M.B.A. ’62
Malibu

I’ve long enjoyed Christensen’s writings, especially on innovation and on how to measure one’s self, but thought his dismissal of the disruptive power of online learning for K-12 public education surprising. Initiatives such as Salman Khan’s [M.B.A. ’03] Khan Academy demonstrate technology’s power to “Flip the Classroom,” and the logic is being extended: the Robert Wood Johnson Foundation is exploring how to “Flip the Clinic” and transform primary healthcare. I wonder if entrenched special interests are the biggest barrier to innovation in these fields?

Andy Arends ’92
Geneva, Ill.

I enjoyed but am apprehensive about Craig Lambert’s optimistic article on Clay-
ton Christensen’s analysis of innovation. Understanding how businesses manage innovation is an excellent example of an important benefit of an education in business or liberal arts, namely to provide useful concepts for succeeding in wildly diverse careers.

Fifty years ago, Thomas Kuhn (’49, Ph.D. ’49, JF ’51) taught us about The Structure of Scientific Revolutions when he labeled disruptive ideas in science “paradigm shifts.” Just as Kuhn’s ideas help us understand the evolving nature of science and technology, Christensen’s ideas will help us understand the evolving nature of business and technology.

Unfortunately, just as clever hucksters abused the idea of paradigms, I am concerned that contemporary gurus will misuse the ideas of disruptive innovation. Disruptiveness, novelty, or absurdity (think quantum mechanics, the flying car, the VW Bug, and the Ford Edsel) are not predictors of either success or failure. While the concept of disruptive innovation can help us develop a variety of options, it is up to us to use our intelligence to pick the option we think will work best and not base our decision on a single simple idea. Slogans can encourage creativity and motivation but are not a substitute for good old-fashioned hard thinking.

JACK LYNCH
South Portland, Me.

Is having the breast-pocket handkerchief [on the cover illustration of Clayton Christensen] on the right a new innovation—or just a reversed image?

HENRY VAILLANT ’58, M.D. ’62, S.M. ’69
Concord, Mass.

SOCIAL SCIENCE
“REBOOTING SOCIAL SCIENCE,” by Elizabeth Gudrais (July-August, page 54), was a very interesting and important article. Of particular challenge is the observation, “There is no consensus on the consequences of inequality.” In this regard, she cites Professor David A. Moss as saying, “[W]e may eventually be able to say with some confidence whether inequality actually causes certain societal outcomes.”

Since the state of public health is a societal outcome, I believe one can answer the question at least in part, definitively, not eventually, but almost immediately by examining the data on the BMI and dental conditions of the people in the lower-income groups as compared with those in the upper-income groups.

FRANK R. TANGHERLINI ’48
San Diego

While I congratulate Moss on his intent to generate theory that bridges the gap between action and theory in the social sciences, if the article is any indication, his selection of examples appears to be significantly biased.

All examples of capture listed in the article were capture of a regulatory agency by private corporations. What his studies apparently omit are capture of regulatory agencies by political interests.

What about capture of the EPA by conservation interests that ignore national interests such as productivity and employment? Capture of the IRS by politically motivated interests? Capture of the Justice Department by people interested in protecting the administration, not citizens? Capture of the FDA—not by pharmaceuticals but by interests demanding overly stringent testing that prevents development of new antibiotics?

It seems these examples of capture are perhaps more worthy of study than those that Moss and his team currently address.

WALCOTT JUDY, Ed.M. ’67
Leesburg, Va.

Better research that focuses on overlooked problems and utilizes the wisdom of different social sciences can only be welcomed. While all problems are probably better understood upon closer examination, and research can help us in formulating remedies, the suggestion that research on inequality can lead to a conclusion as to its merits seems wrong and reminds us of the Southern position on the advantages of slavery in plantation agriculture. We do not need research on the “consequences of inequality” to be shocked by the huge and growing wealth of the American super-rich while many go hungry.

FRANCIS DUMMER FISHER ’47, LL.B. ’51, IOP ’71
Austin

The Tobin Project strikes me as nothing more than a make-work project for academics and consultants who cannot or will not engage in productive, private-sector activities. In other words, the Tobin Project is a bunch of people who want to extend their easy years in academia by claiming a new angle on issues that are already being studied ad nauseam. Nothing that they propose to study is not already being studied by at least a dozen think tanks in Washington, most of whom also fit this same description as “eternal students.”

Furthermore, it seems likely to me that the only answer they will come up with, after five years of expensive study of the issues, is that “further study is needed,” an answer that, not-so-coincidentally, will keep them all in salary for another five years.

The truth is that we already know the answers to these questions. They were known by Thomas Jefferson and Adam Smith in the 1700s and expounded upon by Ludwig von Mises a century later.

JONATHAN L. GAL ’89
Provo, Utah

CUTTING COMIC
Thank you, Mindy Kaling (“Laugh Lines,” July-August, page 20), for omitting the Ed School from your lampoon at Harvard Law School Class Day, recognizing that HGSE graduates are truly noble.

ALEZA BEAUVMAIS, Ed.M. ’99
Athol, Mass.

PRESIDENT FAUST ON DIVERSITY
As a Black American alumnus, I was quite moved by Faust’s powerful and poignant comments in “To Sit at the Welcome Table” (July-August, page 3). I too agree that Harvard University has done much to challenge racism, sexism, and classism at the interpersonal and institutional levels both within the university as well as domestically and globally. And, as the president so profoundly states, much work still needs to be done around these issues. President Faust’s leadership is exemplary and role-models what many of us can do with our Harvard education and credentials along with courage to make this world more tolerant and inclusive.

JOE STEELE ’79, M.B.A. ’83
Craryville, N.Y.

I found President Faust’s letter to be more of the politically correct party-line pandering that has infiltrated and threatens to profoundly alter our institutions of higher learning—of which, I might add, Harvard
is supposed to represent the pinnacle. In my view, admission to Harvard should be based on past demonstrations of academic effort and achievement which hopefully insure future demonstrations of academic excellence and a continuing pursuit of learning that lasts a lifetime. Admission should not be based on race, religion, or gender. Harvard’s faculty should be selected from the world’s most illustrious scholars, who are also people devoted to the notion of communicating with a younger generation.

If Harvard or any other great educational institution focuses on these goals, its population will be diverse.

Gretchen Bachrach
Arlington, Mass.

SEXUAL ASSAULTS

While the topic of “Addressing Sexual Assaults” (July-August, page 23) is clear-cut, the conclusion is flatly wrong. The author writes: “The challenge in addressing sexual assault is that the University is populated by imperfect human beings, not angels.”

To be clear: The challenge in addressing sexual assault is preventing Harvard undergraduates from sexually assaulting other undergraduates because sexual assault is a harmful criminal act.

Any other interpretation is muddy and in fact part of the problem.

Nancy Pagan, M.Ed. ’93
Cambridge

Editor’s note: For an update on Harvard’s sexual-assault policy, see harvardmag.com/assault-14.

HARPSICHORD HARMONY

Who knew Hubbard was created by Harvard alums (Treasure, “Harpsichords Extraordinaire,” July-August, page 88)? Not that it would have made any difference, but I certainly did not when I ordered an “English Spinet” kit back in the 1980s as a project for my wife and me to undertake. We had built a small boat from a kit, so why not a harpsichord? Talk about enthusiastic ineptitude! Building the cabinet was not so terribly hard, once we got the hang of the veneering process. But that only produced a reasonably good looking piece of furniture. After reading the voicing instructions any number of times and examining the implied tolerances between the wires to be plucked and the little pluckers, I realized that without serious help, all we would have would be furniture. To make a long story short, I begged and pleaded with a local expert here in midcoast Maine, and he eventually agreed to do the voicing job. It was finished roughly 20 years after the kit was purchased, and apparently that’s about par for the course. The result looks fine and plays well, but is very sensitive to temperature and humidity, which tends to reduce its use. Who wants to tune every time before playing?

Nancy Pagan, M.Ed. ’93
Cambridge

Cliff Russell, Ph.D. ’68
Alna, Me.

Kudos to Mariana Quinn and Piano Technical Services (PTS) for any efforts to restore the Chickering-Dolmetsch harpsichords. Such restoration will enhance Harvard’s musical-instrument collection, as well as providing a nice footnote to the history of the “Early Music Revival.” I hope further that PTS will restore—versus rebuild—any premier pianos of 1920-1950 vintage Harvard may acquire in the future.
Letters

As many serious pianists have observed, post-1950 pianos generally favor sonic power over refinement. Just compare Arthur Rubinstein’s recordings of the 1960s to those of the 1930s!

Ira Braus, Ph.D. ’88
West Hartford, Conn.

DIVESTMENT

The July-August issue quotes Michael Bloomberg noting that 96 percent of faculty donors contributed to Barack Obama and suggesting a lack of diverse political views in the University (“Talks, and a Text,” page 19). But the same issue notes that, on October 3, President Drew Faust called climate change “one of the world’s most consequential challenges” (“The Divestment Debate,” page 22). Perhaps the Republican Party’s refusal to acknowledge the impact of climate change explains the absence of faculty support.

Richard A. Newmark ’61
St. Paul

In light of reporting in the July-August issue on Harvard’s position on fossil fuel divestment, we wrote Messrs. Paul J. Finnegan and James F. Rothenberg [members of the Harvard Corporation, and Treasurer and past Treasurer, respectively], expressing the perspective summarized below.

Harvard currently holds substantial investments in fossil fuel. The past is no longer prologue for this asset class.

The scientific community—including Harvard’s distinguished climate-related faculty—assert the world must hold global temperatures to no more than 2 degrees C above the preindustrial figure. Governments agree. And, yet, we have already gone half the distance to this ceiling, and are actually accelerating our rapid approach to it. We face an existential planetary threat.

By investing in fossil fuel companies that cling to the outdated business model of measuring success by discovery of new reserves, Harvard is encouraging (and expecting to profit from) the search for more fossil fuel—which will become unburnable if we stabilize global temperatures at levels necessary to sustain life as we know it. When the lid is put on, and carbon emissions are severely limited—as they must be—Harvard will be left holding stranded and devalued assets that can never be burned. (Proven reserves are three to four times what’s needed to transition to renewables by 2050.)

Across the country, hundreds of student organizations work to persuade their institutions’ endowments to divest. Sooner or later, as in the case of companies doing business in apartheid South Africa, divestment from fossil fuel companies will occur. Harvard should be among the first to do so. There are strong, independently sufficient arguments beyond the financial one of standing to justify divestment. They include the moral (it is repugnant to profit from enterprises directly responsible for carbon emissions or to allow shareholder funds to be deployed in searching for more fossil fuel), the practical (a well-led institution should not wound itself by permitting endowment holdings to demoralize faculty and students, with adverse effects on quality of education, enrollment, and campus environment) and, in Harvard’s case, the unique opportunity (and corresponding duty) it has, as one of a handful of world leaders in education, to lead on this planetary issue.

We support these other arguments for divestment. However, we wanted to bring the financial argument, in particular, to Harvard’s attention. Over the past three years, equities in the coal industry declined by over 60 percent while the S&P 500 rose by some 47 percent. Coal, we submit, is the “canary in the oil well.” Disinvestment now, before this opinion becomes commonplace, is just sound, risk-averse investment judgment, fitting well within the duties of a fiduciary.

Bevis Longstreth, J.D. ’61
Retired partner, Debevoise & Plimpton; former member, Securities and Exchange Commission

Timothy E. Wirth ’61
Former U.S. Senator, president of the United Nations Foundation, and Harvard Overseer

T HEY EAT HEMLOCK

“A HEMLOCK FAREWELL” (Right Now, July-August, page 8) calls attention to the danger to certain species of hemlock caused by the woolly adelgid insect. But a correction is in order. The article says that “within the next 10 years, hemlocks in forests across the United States are projected to die off completely.” Later, the article specifies what “across the United States” means: “from North Carolina to southern Vermont, southern New Hampshire, and southern Maine.”

Harvard Magazine editors should be aware that for a long time now the United States has extended far to the west of the original...
13 colonies. As owner of 420 acres of forest land in the Pacific Northwest, I can assure you that our western hemlocks are doing well and will not die out in 10 years.

Neal Koblitz '69 Seattle

PROVIDENCE, THEN AND NOW

First off, many thanks for an excellent and engaging article on Jean McGarry’s writings (Montage, “Rhode Island Blues,” July-August, page 71): you’ve given me someone new to go look up at the Providence Athenaeum!

The point of my e-mail is a somewhat nitpicky correction on the captioning of the city photo accompanying the article, which reads: “Federal Hill in Providence, Rhode Island, today, with its Roman Catholic churches.”

That photo, far from being from today, is from closer to when I graduated Harvard nearly a quarter-century ago: it cannot have been taken any later than the early fall of 1991, as the large Victorian Gothic church looming over the middle ground (center of the three churches readily visible in the picture) is the former Irish Catholic parish of St. John on Atwells Avenue, which was torn down, in the main, in early February 1992. The tower remained for some years as a hulk, but was gone by 1995.

St. John’s was the inspiration for H.P. Lovecraft’s chilling tale “The Haunter of the Dark,” though Lovecraft judged on its date of construction, perhaps conflating it with the East Side’s earlier St. John, Episcopal (now shuttered and decayed/threatened by neglect, also), saying it dated circa 1810-15, when it’s patently the late Victorian Gothic of 1871.

Perhaps relevant to McGarry’s tales of Irish Providence, I note that this was one of the two most imposing Irish parishes in Providence, the other being St. Patrick’s on Smith Hill near the State House, and both have been demolished in the past 35 years, whereas their somewhat later, perhaps grander, Italian counterparts (such as the two flanking St. John’s in your photograph), have not. I’m not sure what conclusions could be drawn from this, but it might be interesting fodder for one of Professor Stilgoe’s students.

The St. John’s site is now a small park at the corner of Sutton Street and Atwells Avenue.

Fred Atherton ’90 Providence

AMPLIFICATIONS AND ERRATA

When he retired from the army last November, Jonathan Newmark ’74, M.D., thought he was the oldest Harvard College graduate on active duty (The College Pump, July-August, page 80). Jim Bayley ’73, M.D., reports that he retired from the army last December, after his fifth deployment to southwest Asia.

“The Divestment Debate” (July-August, page 22) reported that President Drew Faust “announced an initial $1 million in innovation grants...for faculty and student projects at the iLab” [italics added]. The grants, intended to be the first element in a $20-million program, are for research on innovations, but are not tied to the iLab. We regret our reporting error.

An editing error caused the misidentification of the Harvard degree earned by the late Geoffrey Searle, M.B.A. ’65 (“Playing Together, Staying Together,” July-August, page 74). We regret the mistake.