Focus on the Future

PONDERING ITS PROSPECTS during Harvard's 375th anniversary year, the Faculty of Arts and Sciences (FAS) held two latewinter panel discussions about "The Future of the Present"-opportunities for designated professors to examine, respectively, how research and teaching might change in the next quarter-century, and what present strengths and values they hoped would endure as the enterprise evolves.

Moderator Maya Jasanoff, professor of history, began the initial conversation, on February 16, by looking back two decades to her freshman year at Harvard, when iPhones, iPads, Google, Wikipedia, and Twitter didn't exist and even e-mail was rarely used. Looking ahead to 2036, she encouraged her colleagues to speculate on "how the digital revolution is changing what we do as scholars and teachers, and what we can do in response to it." Among the highlights of their presentations:

Professor of astronomy David Charbonneau addressed "the exponential increase in data, and the ways we collect data." The robotic telescopes he uses to search for extrasolar planets already collect 10 to 20 gigabytes of material per night, and new devices will collect orders of magnitude more—requiring data management and analysis skills alongside physics or astronomy training. Researchers in the field are generating 7,000 papers monthly, posing obvious problems in keeping up with the torrent of discovery.

Such discovery, of course, does not come cheap. Professor of biogeochemistry Ann Pearson noted that "minor instrumentation" in her field is "anything that costs less than \$2 million"—and naturally, all scientists clamor for the latest, fastest, most powerful devices, to keep pace with peers.

ties, but only slowly," according to Martin Puchner, Wien professor of drama and of English and comparative literature. He described how a Google-assisted search enabled him to locate more than 100 examples of "extremely ob-

scure plays" in which Socrates

Illustration by Mark Steele

Yesterday's News

From the pages of the Harvard Alumni Bulletin and Harvard Magazine

1917 The Crimson endorses wartime prohibition; Harvard Alumni Association officials advise against serving liquor at reunions.

1922 Despite the belief of many alumni that "one does not advertise one's mother," the Associated Harvard Clubs Policy in Publicity committee advises repeal of the rule forbidding photographers in the Yard on Commencement day and encourages use of "the moving picture as a medium for pictorial record and current information" about Harvard.

1927 As the Weeks Bridge is dedicated and the Fogg Museum opens, debate rages over the planned construction of the \$1-million Memorial Church. Alumni write to complain that they would rather have a memorial swimming pool.

1942 Undergraduate dinner conversation includes "the sugar rationing system, the bicycle shortage, and the cuffless-trousers-for-victory campaign."

> 947 The faculty discusses extending wartime rules that let some Radcliffe students take classes at Harvard. The New York Times calls it "one more step in the emancipation of the female, who was long considered above or beneath the need for higher education."

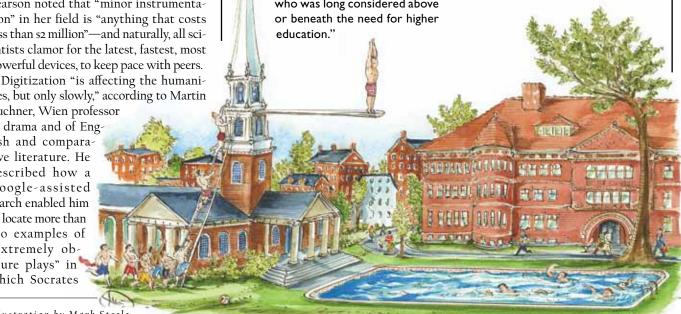
1952 More than a thousand people gather in Harvard Square to welcome "Pogo" cartoonist Walt Kelly to Harvard for a lecture and "Pogo for president" rally. When Kelly is delayed, some in the crowd begin blocking traffic. Cambridge police move in, and by evening's end, 28 undergraduates have been arrested.

1957 The Faculty of Arts and Sciences endorses the creation of a visual arts center and of a theater, because of a "lively resurgence of undergraduate interest in the dramatic arts since World War II." John L. Loeb '24 contributes \$1 million toward the theater a week later.

1967 Radcliffe president Mary Bunting prohibits cigar smoking in Hilles Library.

1977 Under a new agreement, Harvard and Radcliffe will maintain a coordinate relationship: Radcliffe will retain its institutional independence but delegate responsibility for undergraduate affairs and instruction to Harvard.

1982 Kermit the Frog addresses graduating seniors in Sanders Theatre, telling them, "As you set sail on the great vacation of life, think of Harvard as your travel agent."



Agassiz professor of zoology Hopi Hoekstra focused on the classroom, today "a sea of laptops" and perhaps tomorrow an empty venue as students take in lectures (if those are still given) from bed. Underscoring what some of her colleagues than (in 2036) working at internships or on their start-up ventures.

Were her projections tantalizing or frightening? Jasanoff asked. colleagues that day to and Robert Wood

tease out those attributes of academic life—classroom interactions, scholarly disciplines, liberal-arts verities—that might persist in decades to come, when students would have to adapt continuously, collabo-

rate, and hone their skills in interpreting information across geographic distances, disciplines, and stages of life.

Claudine Gay, professor of government and African and African American studies,

asked, "What function should the Harvard campus serve when virtual classrooms reach across the world?" She said her "nostalgia for the present" might make her seem a Luddite, but she felt strongly that place matters for education, just as citizens' social and economic contexts shape their voting behavior and political beliefs. Much as "citizens are not unmoored social isolates," it is virtually "axiomatic" that a physical campus matters to students and scholars. "Discovery," she said, "is not possible without dialogue"—and a campus is "the only place where the caravans meet."



From left: Maya Jasanoff, Martin Puchner, Ann Pearson, Hopi Hoekstra, and David Charbonneau

had said, she noted, "Now, students are analyzing a lot of data, and are spending less time in the lab gathering data."

JASANOFF TOOK UP these themes at the March 7 session, propounding an almost dystopian view of Harvard at its four-hundredth anniversary looking back to 2012: an era when "Widener was full of books. People checked them out" even though they were "chunky, heavy things" and—perhaps even more remarkably—when professors still wrote books and students attended classes between 10 A.M. to 4 P.M., rather

Decanal Duo

Jones professor of American studies Lizabeth Cohen, interim dean of the Radcliffe Institute for Advanced Study since last July, has been appointed dean. In a March 8 announcement, President

Drew Faust cited her dedication to the "pursuit of new ideas and collaborations across the academic disciplines, the professions, and the creative arts." Cohen, an American social and political historian, called



Lizabeth Cohen

Radcliffe "Harvard's front door—open and welcoming to all who seek intellectual nourishment and creative inspiration."

On March 30, Faust appointed David N. Hempton, McDonald Family professor of Evangelical theological studies, the dean of Harvard Divinity School, succeeding William A. Graham, who steps down

on June 30. Hempton joined the faculty in 2007. He said he welcomed "the opportunity to engage with colleagues... across the University to improve Harvard's approach to the study of religion."



David N. Hempton



Then she called on her From left: Matthew Nock, Claudine Gay, Parimal Patil,

Professor of psychology Matthew Nock, echoing Charbonneau, said that 1.5 million new journal articles a year meant researchers were ever more dependent on the disciplines and processes of peer review to "organize and navigate that information" and help separate science from "nonscience." Online tools might speed such reviews and subject the underlying data to greater transparency, but the process of peer vetting must remain intact.

In an interdisciplinary era, said associate professor of electrical engineering Robert Wood-who collaborates on an enormous

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project to design microrobots, with eleven principal investigators—classical disciplinary training remains essential. Engineering is, in that sense, "an inherently historical discipline."

Support for that view came from an utterly different direction, from professor of religion and Indian philosophy Parimal Patil, who studies those subjects as they arose in classical Sanskrit texts. Making the case for the liberal arts, Patil cited two core intellectual values: "the value of slow academics" (of deep analysis—in text, laboratory experiments, or the formulation and testing of hypotheses—driven by curiosity, rather than for any instrumental purposes); and "the importance of talking to all the wrong people" (from other disciplines, who can challenge one's assumptions through "genuine, heated, but intellectually productive conversations"). To that end, he advocated that professors "take each other's courses."

It was a vivid way of illustrating the value of a physical campus, of chance encounters and personal interaction—even as an era of digitally assisted, global research and teaching unfolds. As Jasanoff summed up, the panels themselves had proven several speakers' point about "the value-added of getting people into the same room, across disciplines, in unusual combinations."