

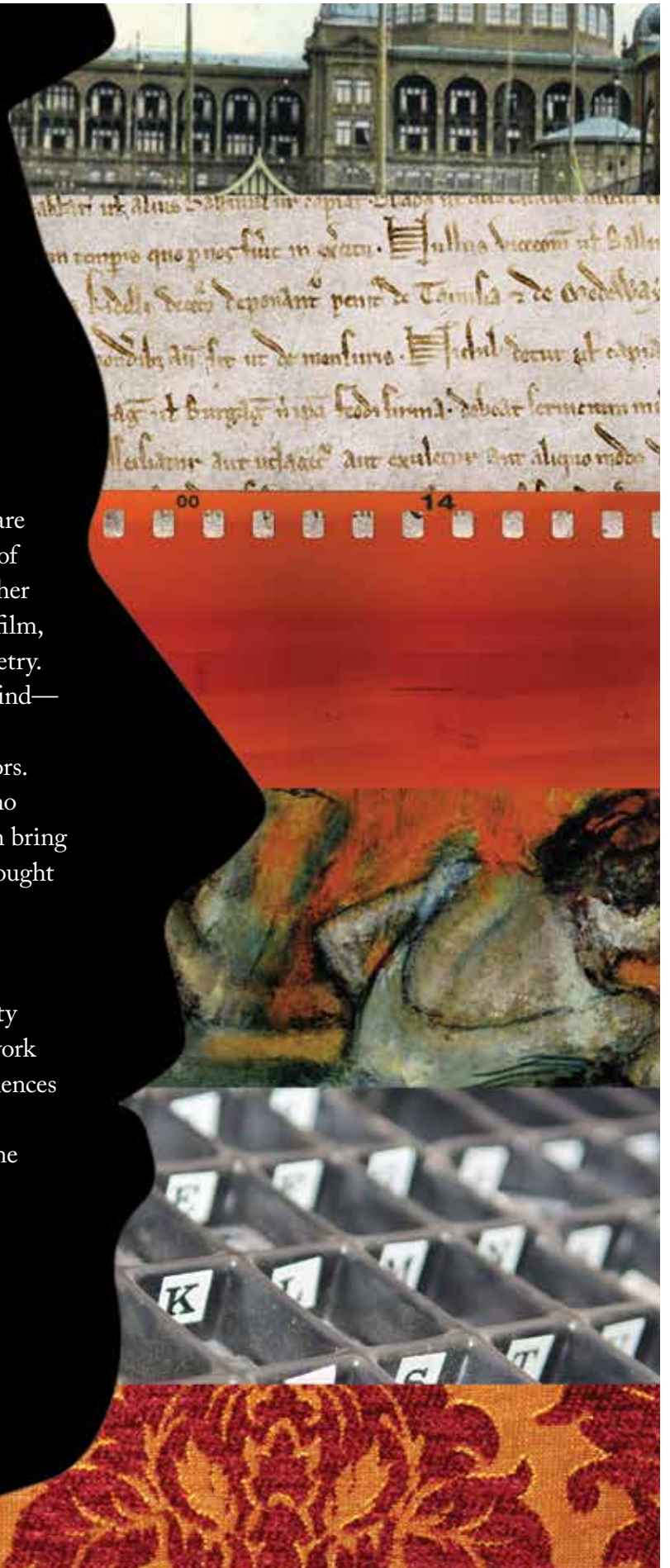
The Humanists

by Cynthia Eller

When most people imagine a Caltech professor, it is probably a safe bet that they are not thinking about a scholar of Victorian literature, a researcher who examines 20th-century film, or a specialist in medieval poetry. But that is exactly what you find—and more—when you talk to Caltech’s humanities professors.

The faculty members who teach such subjects at Caltech bring to their fields the rigorous thought and imaginative perspectives Caltech is known for.

E&S recently asked six of Caltech’s humanities faculty members to reflect on their work as humanists and their experiences teaching the humanities to Caltech students. Here is some of what they had to say.



JENNIFER JAHNER

—
assistant professor of English

Jahner arrived at Caltech in 2012, immediately after completing her PhD in English at the University of Pennsylvania. Her specialization in medieval poetry has taken her through the study of history to an examination of multilingualism, as she strives to understand how the poetry of that era was a vehicle for political and legal discourse. Her current book project, tentatively titled 'The Conjured Realm: Poetry and Political Formation in the Era of Magna Carta, examines 13th-century British poetry and its connection to the political reforms of the day.

Before I had set foot in an actual Caltech classroom, I imagined humanism and empirical science as remote islands, and my task as that of a literary tour guide, explaining our strange customs and ways. Upon starting here two years ago, I quickly realized that I needed to revise my metaphors. First, as it turns out, we are all denizens of the same small island—Caltech—and across the disciplines we share a common dedication to discovery, analysis, and intellectual integrity. Second, it became clear that Caltech students are hardly strangers to literature, nor to the questions of ambiguity and interpretation that literary texts inevitably raise. Teaching literature at Caltech, then, is simply the work of teaching literature: providing students with the context necessary to ask good questions about texts, and the tools necessary to pursue and demonstrate their answers.

One of the most dramatic differences between Caltech and more traditional research universities, however, is the fact that those of us in the humanities belong to a department combining English, history, and philosophy. The interdisciplinary collaboration that many universities hold as a desideratum, we practice on a day-to-day basis. This proximity to other methods and types of training shapes how we think about the boundaries of our respective fields.

For instance, part of my research looks at how scholars in the Middle Ages put their university training to work in the service of political causes, penning propagandistic verses for and against documents like Magna Carta.

Medieval writers did not recognize the same disciplinary divisions that we do today, and those of us who study the medieval past regularly confront what, to modern readers, are startling conjunctions of genre and subject matter: poetry that conveys philosophy, history that explicates natural science, or philosophy that speculates on literary fiction. Caltech promotes a similar sense of intellectual capaciousness and juxtaposition, allowing those of us who work at the seams of various fields to develop truly interdisciplinary projects. All of us cultivate relationships beyond the Institute as well, through local partnerships and international collaborations. We are fortunate to have the scholarly community and resources of the Huntington Library only a mile away.

Since the advent of the universities in the Middle Ages, the humanistic disciplines have been at the core of higher learning, teaching students how to articulate and interpret what they see, and how to situate bodies of knowledge in relation to each other. The humanities constitute a vital part of the Caltech mission as well. Literature, history, and philosophy teach us how to communicate our expertise to others and to translate our research across specialties and beyond the boundaries of academe. Even more fundamentally, the humanities teach us about the histories of knowledge and creative endeavor, allowing us to see that truths are products of their time and place as well as products of the minds and methodologies that discern them. ♦





JOHN BREWER

*Eli and Edye Broad Professor of Humanities and Social Sciences
and professor of history and literature*

*Brewer was educated at Cambridge University with a specialization in 18th-century British history. He has been educating others ever since, in locations ranging from Los Angeles to Chicago, Florence to Paris. He came to Caltech in 2002. In his research, Brewer takes provocative themes—the interaction of culture and money in the art world, for instance, or the origins of tourism—and investigates them across cultures and down through time. Brewer’s most recent book is *The American Leonardo: A Tale of Obsession, Art and Money* (Oxford University Press, 2009). An earlier volume, *The Pleasures of the Imagination: English Culture in the Eighteenth Century* (Farrar, Straus and Giroux, 1997), was nominated for the National Book Critics Circle Award and won the Wolfson History Prize.*

Caltech offers unique advantages: an academic structure that not only permits but encourages cross-disciplinary research, an intimacy that stems from its small size, an unwavering commitment to the creation of an environment conducive to high-quality research, and undergraduates who may not know a lot about the humanities, but whose smarts are second to none.

The mechanics of research in the humanities is both similar to and very different from work in the sciences. I don’t have a lab on campus; instead, I use libraries and archives dispersed in different countries—the United States, Britain, Germany, France, and Italy.

In this sense, my working habits are probably closer to those of a geologist; I spend lots of time in the field. But I focus my attention on writing books, not papers. Words—lots of them—rather than numbers are the tools of my trade.

My last book used the history of a forged painting to investigate how the old-master art world worked; my current project examines the region around Naples in the 19th century. This project involves the history of archaeology and geology, art history, the history of migration and exile, politics, and economics in order to understand how the area around Naples acquired a specific identity.

During my time at Caltech I’ve taught and run research projects with colleagues in related disciplines

such as the history of science, art history, and literature. I’ve also made use of the expertise of Caltech scientists—with biologists for a project on modeling in the sciences and the arts; with George Rossman and Provost Ed Stolper for information on Vesuvius and volcanology. I am currently organizing a conference that will bring together humanists and social scientists with technical experts at the Resnick Sustainability Institute.

What I value most about Caltech is its commitment to intellectual freedom and its trust in its faculty to fulfill the Institute’s purpose, which is to produce outstanding research. Such confidence, which is in rapid decline in many educational institutions, is what makes for good scholarship. ♦

OSCAR MANDEL — *professor of literature, emeritus*

Mandel taught English at Caltech for over 40 years. Born in Belgium, he is a bilingual French/English author of poetry, fiction, and plays, as well as a translator and analyst of all these genres, plus art history. His Gobble-Up Stories, a series of brief morality tales with inventive animal and human characters, were recently performed by Theater Arts at Caltech (TACIT). A collection of his fiction, including the Gobble-Up Stories, was released this year by Prospect Park Books under the title Otherwise Fables.

I have been privileged to work at Caltech under every Caltech president but two. When I was hired in 1961, the chairman of the Division of the Humanities and Social Sciences was a professor of literature: Hallett Smith, a distinguished Shakespeare scholar. The way Hallett Smith hired me is worthy of note. I had met the division’s French instructor, Paul Bowerman, at a dinner party. I was looking for a job after a year as a Fulbright lecturer in American



CATHERINE JURCA

—
professor of English

*Jurca came to Caltech in 1995, though her connection to the Institute goes back much farther (see below). A professor of English, Jurca specializes in 20th-century American novels and classical Hollywood films. Her most recent book, *Hollywood 1938: Motion Pictures' Greatest Year* (University of California Press, 2012), looks not just at the movies, but at the entire culture that sprang up around them: how the film industry operated to produce, distribute, and exhibit films and how consumers made them a part of their lives.*

My connection to Caltech goes back more than 80 years. My maternal grandfather, an engineer, matriculated here one month before the stock market crash of 1929. My father graduated 30 years later and worked as an aerospace engineer until he retired. As a humanist, I am the family oddity.

Nevertheless, Caltech was my dream job: a chance to return home, do my research with maximum resources and minimum interference, and teach bright, disciplined scientists and engineers other interesting, necessary ways of understanding and communicating about the world.

poetry in Amsterdam. Professor Bowerman introduced me to Professor Smith. The latter interviewed me, took into account the recent publication of my *A Definition of Tragedy* (New York University Press, 1961) and an article or two (perhaps he even read them), invited me to lunch at the Athenaeum together with Cushing Strout, a professor of history, and decided to hire me. It was a year's appointment to replace someone on leave of absence. That

My dad gave me pause, though, when he told me the story of a fellow student—one of the smartest in his year—who politely listened to an excellent English lecture on the first day of a freshman humanities course and afterward asked: “What do I need to do in this class to get a D?”

I wondered, would my students feel that way about American literature and film? Do they? No way. Caltech students are overwhelmingly engaged and often quite enthusiastic, both with the specific content of our courses and with the process of developing new tools for analyzing and appreciating the things we study.

My most rewarding classroom experience is a two-term course in classical Hollywood film. The black and white movies we watch, with seamless continuity editing and shamelessly happy endings, are scarcely recognizable as movies to my students. Through a combination of industry history and close analysis of individual films, I get them to consider how and why movies looked the way they did then—and how and why they have changed over time.

My teaching relates closely to my research. A recent project involves an extensive analysis of daily box-office records from the Stanley-Warner theater chain, a unique dataset that is allowing me to discover more about audience choices and how film distribution and

someone became a dean elsewhere, and as I seemed to have done no harm during that year, I was made permanent. That is approximately how Caltech—or at any rate HSS—functioned in those years.

Caltech in general, and the division in particular, remained kind to me and rewarded me as a teacher, scholar, and writer. By teaching the basics of English literature, drama from the Middle Ages to the mid



exhibition responded to and shaped those choices in the mid-1930s.

I would never have dreamed of using the word “dataset,” let alone embarking on a collaboration with an economist, if my Caltech colleagues had not given me the opportunity to learn about the methods and insights of social science history. Certainly I bring an appreciation of the qualitative aspects of audience behavior to these box-office figures; numbers can't tell us everything about phenomena. But Caltech has taught me that combining different approaches to knowledge enables a much richer picture of the human experience. In this case, it allows me to not only uncover what historical moviegoers did, but also to see, perhaps, why they made those particular choices. ♦

20th century, and fundamentals of the art of poetry, did I produce a generation of Caltech graduates who are cultivated scientists who read Jane Austen when not tweaking electrons or synapses, subscribe to chamber music series, and frequent art museums and theaters? We cannot know, but we do our duty by opening doors to realms of thoughts and passions neighborly to those that the sciences offer. ♦



CHRISTOPHER HUNTER

—
assistant professor of English

*Hunter came to Caltech in 2010 as an assistant professor of English with a specialization in American literature of the 18th and 19th centuries. He is interested in how the genre of autobiography developed historically, and is preparing a book titled *A New and More Perfect Edition: Reading, Editing, and Publishing Autobiography in America, 1787–1850*.*

Hunter has been heavily involved in the study of Benjamin Franklin's autobiography, which he describes as "the most published, read, and studied memoir of all time." Hunter is part of a team of scholars now working on a facsimile edition of the original manuscript.

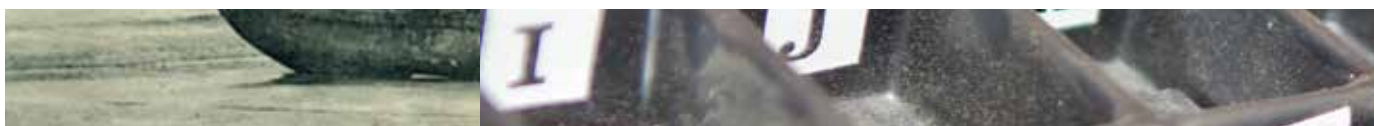
As a high school student I spent a summer at MIT taking classes in calculus, physics, chemistry, engineering, and writing. I was an aspiring astrophysicist—in fact, on a few occasions I came with the Santa Monica Amateur Astronomy Club to talks and star parties here at Caltech. In college I decided to concentrate on comparative literature instead of physics, but I returned to MIT for the next five or six years, first to tutor and later to teach the same summer writing course I myself had taken. Little did I know it was preparing me to return to Caltech! I jumped at the chance when it came, and it has been wonderful to find myself once again in front of classrooms full of STEM majors. Caltech students are brilliant and sharp-eyed, and teaching them has made me a better humanist.

My own work focuses on the history of the book, which means that I'm interested in how the physical form of books, letters, newspapers, and the like affected the meanings of the texts they contain. This approach really resonates with Caltech students, in part because it considers technical and economic questions alongside the cultural and interpretive ones they might expect from an English class.

Books are products; they are

objects. In Colonial and post-Revolutionary America they were made by craftsmen and craftswomen using tools that would have been recognizable to Johannes Gutenberg, the 15th-century Mainz goldsmith who perfected printing with moveable type. The 19th-century technological innovations that transformed those trades into an industry also dramatically changed the look, availability, and price of books. These changes mattered as much to scientists as they did to writers and readers of literature. One of my goals is to teach my students to see the technical processes at work in the books we study.

That is why, as much as possible, I like to expose my students to rare books and artifacts from the time periods we study. After a few weeks of training in basic bibliography, they can go into the Caltech Archives and generate new insights about its small but extraordinary collection of rare books. Often, they work on texts by scientists they've studied in their STEM classes: people like Newton, Kepler, Galileo, and Darwin. These encounters with the history of their own disciplines should help make them better scientists by making them more aware of how knowledge is produced and how it circulates. ♦





DEHN GILMORE

—
assistant professor of English

Gilmore specializes in 19th-century British and European literature and has a special interest in the relationship between Victorian literature and visual culture.

*This focus is evidenced in her first book, *The Victorian Novel and the Space of Art: Fictional Form on Display* (Cambridge, 2013), and her book-in-progress, "Large as Life": The Victorians' Disproportionate Reality, which considers the Victorians' avid interest in the "life-sized." In 2013, Gilmore won the Nineteenth Century Studies Association Article Prize for the best article from any scholarly discipline focusing on any aspect of the 19th century. She came to Caltech in 2009.*

When I began teaching, I was a graduate student at Columbia University, where undergraduate students are required to undertake a rigorous "great books" curriculum. This meant that by the time they entered my literature sections, they were primed to murmur knowingly at references to Shakespeare or Herodotus, Euripides or Austen, and to make such references themselves.

Arriving at Caltech, I rapidly discovered that my new students' knowledge base was entirely—and, in retrospect, unsurprisingly—different. Their most rigorous preparation had usually been scientific and mathematical, so it no longer helped to compare a particular poem to an Elizabethan sonnet, or to say that a novel had been inflected by the author's reading of Greek tragedies. Though from the outset I appreciated Caltech students' intense concentration and focus, I initially had difficulty figuring out how to build a web of context and recognition for them. In time, however, I came to appreciate a wholly new set of avenues along which to make connections, and from which I have learned a great deal myself.

It may have been the memorable day when a discussion of Yeats's poem "Sailing to Byzantium" turned from consideration of themes of aging and poetic immortality to heated talk of automata, and whether one could in fact make a nightingale "of hammered

gold and gold enamelling / To keep a drowsy Emperor awake." Or it may have been the time a student knocked on my door to shyly admit that he had been trying to work out how Dickens's complicated multiplot novels would work as computer programs. But regardless of exactly when it happened, at some point the works studied in all my classes—often works I had taught many times before, or even written about—started to seem newly alive to me, full of new dimensions, dynamics, and correspondences.

The results of these teaching experiences have become embedded in my syllabi. My class on major British authors has migrated, over time, into a survey of "the scientific imagination" from Marlowe to McEwan, with stops along the way for writers like Darwin and books like *Frankenstein*. And my 19th-century classes now *always* include Sherlock Holmes, whom my students all invariably know better than I do myself.

I have come to appreciate and to value highly my students' affinities with the great detective of Baker Street—their insatiable curiosity and mastery of what to the outsider can seem like arcane knowledge, and their restless determination to crack the case and to nose out all the clues they can along the way. With the classroom as mystery space and the game afoot we plunge on together. *ess*

