

Between Experience and Experiment:

FIVE ARTICLES AT AN EARLY MODERN CROSSROADS

Roland Greene and Cécile Alduy

WHEN IN PETRARCH'S FIRST SONNET HE ANNOUNCES THAT "ove sia chi per prova intenda amore, / spero trovar pietà, nonché perdono" (where they may be who understand love by proof / I hope to find pity, not only pardon), he opens not only a sequence of poems, his *Rime sparse* or *Canzoniere*, but a new episode in the mutual entanglement of two concepts: experiment and experience, the topic of five articles in *Republics of Letters*.¹ The articles collected here were delivered at a conference, "Between Experience and Experiment," in 2008 at Stanford University.

In the later Middle Ages, the Romance vernaculars and English maintain an ambiguity around these concepts.² Both terms are derived from the Latin *experior* (to try), but there is often little distinction made between different sorts of trials. A single term such as *experiment* or *experience* often appears to straddle meanings that modern readers will come to see as distinct, such as the formal process of trial and error or the informal apprehension of quotidian events. When Petrarch writes "per prova" (by proof), he stretches the available vocabulary by means of context to suggest something more capacious than what the noun allows—and many translators have responded by translating "prova" as the modern "experience."³ In effect, he finds the con-

¹ Francesco Petrarca, *Canzoniere*, ed. Marco Santagata, rev. ed. (Milan: Mondadori, 2004), 5.

² As a prolegomenon to the considerable literature on this topic, see the classic article by Charles B. Schmitt, "Experience and Experiment: A Comparison of Zabarella's View with Galileo's in *De Motu*," *Studies in the Renaissance* 16 (1969): 80–138. See also Michael Baxandall, *Painting and Experience in Fifteenth-Century Italy: A Primer in the Social History of Pictorial Style*, 2nd ed. (Oxford: Oxford University Press, 1988); Peter Dear, *Discipline and Experience: The Mathematical Way in the Scientific Revolution* (Chicago: University of Chicago Press, 1995); and Mary Baine Campbell, *Wonder and Science: Imagining Worlds in Early Modern Europe* (Ithaca: Cornell University Press, 1999).

³ Francesco Petrarca, *Petrarch's Lyric Poems*, ed. and trans. Robert M. Durling (Cambridge: Harvard University Press, 1976), 36.



cept before the word *experience* (or in his case, *esperienza*) is ready to receive it. Some decades later Chaucer's Wife of Bath observes that

Experience, though noon auctoritee
Were in this world, is right ynogh for me
To speke of wo that is in mariage,⁴

and while she has access to the word, its differentiation from *experiment* is still incomplete; modern readers put into her "experience" the meaning to which they are accustomed, but in Chaucer's time the term and the concept are only beginning to emerge. The early modern story of these ideas tells how they become distinct from one another, as each one claims a zone of authority, but also converge for the last time before modernity.

The essays collected here in *Republics of Letters* treat a long chapter in early modern European culture during which experiment and experience are engaged in a process of mutual definition, even as they depart from each other. It was as though the original fusion of the two ideas made them somehow ready to comment on each other—especially where experiential perspectives might lend weight to a process of trial or experimental procedures might reveal the phenomena of natural existence as constructed. Perhaps because of their past coincidence, experiment and experience have a stake in one another during the sixteenth and seventeenth centuries. In several ways and by different disciplinary lights, the essays here consider how the substance of individual and collective experience—including belief, doubt, the recognition of identity, and the longing for immortality—came to be reinterpreted by experimental means.

George Hoffmann argues that in the sixteenth century, faith was transformed by a new application of doubt—not as a random or contingent event, but as a socially embodied position called atheism, which seemed to be everywhere and nowhere in the period. Atheism, Hoffmann shows, achieves the status of a kind of experimental alternative to faith, and it renders the Christian mind a laboratory for the self-conscious exploration of its own values. Jessica Riskin shows the ubiquity of a certain mode of collaboration of experiential and experimental projects in the Renaissance, namely the making of lifelike machines, mechanical icons, and hydraulic amusements. She argues, in effect, that before they separated, experiment and experience enjoyed a final passionate embrace in the mechanical culture that sought to build primary feelings such as faith and pleasure from the outside in, through clockwork, automata, and other devices. And Mary Baine Campbell shows another encounter between feeling and artifice in the sixteenth-century Paracelsian culture of alchemy and especially manmade humanity. Campbell demonstrates that for all our attention to the problem of difference and otherness in early modern culture, the problem of sameness—of what is and is not "too much of the same"—was perhaps no less urgent. Here too, a question framed through experience was addressed through experiment, producing the homunculus, the golem, and the domesticated monster of Renaissance poetics, the metaphor. Campbell considers how metaphor as a trope (to us, perhaps "just a mysterious way of saying something mysterious") belonged in a line that extended to alchemical curiosities like artificial men, and was viewed with a degree of awe and dread now mostly lost to us.

All of these articles concern early modern constructions (atheism, hydraulics, metaphor) that embodied or witnessed the mutual involvement of experiment and experience as a crossroads in what Campbell calls a culture of signification; each such construction (and there are several more discussed by Hoffmann, Riskin, and Campbell than we have mentioned here) sur-

⁴ *The Riverside Chaucer*, ed. Larry D. Benson, 3rd ed. (Boston: Houghton Mifflin, 1987), 105.

vives to the present day, under the harsh light of rationalism and literalism. The articles remind us of the productive energies in a transitional era that did not yet have to choose between experiment and experience.

If there is a liminal figure who carries us over from the late medieval coincidence of experiment and experience to the early modern differentiation between these concepts, it is Montaigne. His *Essais*, especially “De l’expérience,” appear more or less when the two concepts are drawing apart from one another, and as much as any sixteenth-century figure he brings the notion of individual experience into common understanding. And yet the ruling principle of experiment is seldom far from Montaigne’s thought—for example, in the provisional, highly constructed character of everything we recognize as natural.

This collection of articles includes two that are informal essays in Montaigne’s sense of the term. At the Stanford conference, they originated in a panel discussion on his notion of experience. Anthony Long locates Montaigne between philosophical traditions, looking backward (as Montaigne suggests we do by citing classical authors throughout his essay) to antiquity for possible models, and ahead toward Descartes, Nietzsche, and Rorty for comparable philosophical positions. Reading Montaigne through the lens of classical philosophy enables Long to recover the coherence of Montaigne’s statements on experience, the possibility of knowledge, and the foundational status of nature in his epistemological and ethical vision of man. Moreover, Long highlights the uniqueness of Montaigne’s position at the intersection, or one might say on the fringe, of at least two major philosophical traditions, Pyrrhonism and Seneca’s *Moral Epistles*.

Timothy Hampton’s masterly reflection on “De l’expérience” reveals both the structure and the ground of that essay—how it is organized, and how it revises received notions of the experiential basis of writing away from classical authority and toward first-person observation. Hampton’s observations about how Montaigne exerts control over the ungovernable category of experience—turning “a reflection on experience into a reflection on those discourses that would presume to control experience,” and setting one aspect of his experience (the bodily) against another (the metaphysical)—go to the heart of this pivotal essay.⁵ A

⁵ John Bender, “Novel Knowledge: Judgment, Experience, Experiment,” in *This Is Enlightenment*, ed. Clifford Siskin and William Warner (Chicago: University of Chicago Press, 2010), 284–300, carries the topic forward into the first half of the eighteenth century and the novel.