
Measuring the New World: Enlightenment Science and South America by
Neil Safier

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The cover illustration to this book shows a savant in European clothes (including cocked hat) writing while seated at a table that is precariously balanced on a narrow raft poled along by nearly naked Indians, and riding scarcely more than a few inches above the Amazon river as it rages through a narrow gorge. The savant looks down onto the page in front of him rather than around to the surrounding world of teeming nature. He and the Indians make no contact with each other, even though his life depends on their skills.

The savant is Charles-Marie de La Condamine, member of the Paris Academy of Sciences, mathematician, explorer, and surveyor; and the jacket picture contains all the major themes of this book. The context is the eight-year French expedition to Peru starting in 1735, of which La Condamine was not the leader but made himself its best-known member by his writings. For years debate had raged over the shape of the Earth. English Newtonians believed (correctly) that the Earth was an oblate spheroid; and French Cartesians, that it was a prolate, rather like an upright egg. The expedition, timed to coincide with a similar one to Lapland in 1736–1737, was an attempt to settle the question by measuring the precise length of a degree of latitude at the equator. At the time that Safier wrote this book, there was no modern history of the La Condamine expedition in English. Safier concentrates on La Condamine's writings and on the textual history of the journey, which went far to form European impressions of Amazonia, rather than on the history of the measurements performed by the expedition as a whole.

Yet this book is a highly important contribution to the expanding field of Iberian science. It fits well with the emphasis in current historiography on how knowledge in areas outside Europe was created in ways that were

contingent on social situations and forces, and manipulated in ways that were often unavowable because they were dependent on the unacknowledged support and information of Creoles and Indians. Safier's account of the way in which the map of Quito was made fits well here. Knowledge, in this historiography, is made on frontiers such as Amazonia rather than in the European centers of Enlightenment with their institutional 'centers of calculation'—to use Bruno Latour's famous phrase.

Safier's book about La Condamine's books and papers uses insights from the current history of the book and asks how these literary artifacts, including maps, were created and circulated, and how by these means La Condamine displaced prior cartographers and travelers, even while indulging in fantasies of El Dorado and tribes of Amazons. La Condamine's negative portrayal, for example, of Amazonian indigenous people as lazy and weak withstood the protests and criticism of Creole writers from the Spanish and Portuguese colonies. It was La Condamine's account which passed into Buffon's *Histoire naturelle* and Diderot's *Encyclopedie*, the two great compilations of the age.

But what was this knowledge created on the periphery? Safier's own account shows that La Condamine was able to produce a picture of Amazonia and of his own intrepid passage through it which was remarkably resistant not only to the reality of the region but also to the local knowledge which surrounded him. The knowledge that was made in Amazonia and accepted as truth in the Parisian 'center of calculation' showed that one strategically placed European traveler could by a judicious mixture of plagiarism, neglect, and silent incorporation skew the picture of an entire region.