

REVIEW | MARK FEENEY

# At Harvard, taking the measure of what happened when worlds collided

Along with some 80 items in ‘Measuring Difference’ is a reminder that measurement, in all its forms, is a human invention

By [Mark Feeny](#) Globe Staff, Updated November 26, 2024, 1 hour ago



A measuring stick for the Mexican vara, featuring multiple sub-units of measurement and the seal of the Mexican Republic. NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY MUSEUM AND ARCHIVES

CAMBRIDGE — Measurement is at the heart of what science does, and difference defines life on this planet — human existence especially. So the interaction of measurement and difference is inescapable and often essential. It can also be put to dubious, even disturbing, uses. That is the burden of “Measuring Difference,” which runs at Harvard’s Collection of Historical Scientific Instruments through Aug. 26.

That’s a bracingly broad title. And the sections the show has been organized in are no

less broad. They include measuring labor, measuring space, measuring nature, and measuring humans. Yet in practice the show has a much narrower focus, even if it jumps around a lot within that narrowness. The narrowing is geographical and historical in nature: the coming of European powers (and power) to the Americas. “Americas” is a reminder that naming is itself a version of measuring (and power).



Altazimuth graphometer by Muerand, Paris, 1780. HARVARD COLLECTION OF HISTORICAL SCIENTIFIC INSTRUMENTS

Europeans, a wall text states, “introduced new measurements to describe and exploit the ‘New World.’ Existing ways of understanding and explaining the world and our relationship to others were displaced, cementing European measures as norms and tools of authority.” That use of the first-person plural is both polemically revealing and slightly puzzling. Is it universal, which rather vague-ifies the argument, or does it indicate an identification with those who lived in the epoch referred to as pre-Columbian (again, naming as measuring)?



human inventions, it has often been put to distressing uses. But the best reason for seeing the show is the opportunity to enjoy the handsomeness, even beauty, of many of those items.

Alexander von Humboldt's 1854 map of Ecuador's Chimborazo volcano is a particularly fine example. Others include two pages from a 1552 herbal manuscript, the Codex Badiano (with text in both Latin and the Indigenous language Nahuatl); an 18th-century altazimuth graphometer, a surveying instrument; a gorgeous "Color Chart for Naturalist-Painters," from Madrid, dating to the late 18th century; an Andean khipu, an implement using knotted strings to record various sorts of information; a luxurious-looking Spanish compass, circa 1600. The list very happily goes on.

Chipanae  
xihuitl.

Tlayapaloni. Tsalhaueuett.



**Vomica.**

Folia herbe tlatlanquaye, radix tsalhaueuett, tlayapaloni & chipanae xihuitl, sine aqua hñ confrita in oñj uistello capitis uomica a pure diligenter purgata in die apponentur mane, scilicet & uespere, quo facto, caput bene cooperietur. Sed si aliqua in parte caput tantum putrescit urina laudabitur & idem medicamentum adhibebitur.

“Measuring Difference” begins with a passage taken from Italo Calvino’s beguiling one-of-a-kind novel [“Invisible Cities.”](#) The full quotation reads: “I could tell you how many steps make up the streets rising like stairways, and the degree of the arcades’ curves, and what kind of zinc scales cover the roofs; but I already know this would be the same as telling you nothing. The city does not consist of this, but of relationships between the measurements of its space and the events of its past.”

Calvino’s words evoke the thrust of the show at its best, even if “measurements” does seem to parry that thrust a bit. Like all the wall texts, this one is presented in both English and Spanish. This makes good sense, in light of so much of the subject matter. But here’s the thing. Calvino wrote it in Italian. If you’re going to present not one but two translations, why not give it in the original language, too? If nothing else, that would be a measure of thoroughness as well as difference.

## MEASURING DIFFERENCE

At Collection of Historical Scientific Instruments, Harvard Science Center, 1 Oxford St., Cambridge, through Aug. 26. 617-495-2779, [chsi.harvard.edu](http://chsi.harvard.edu)

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