To survey geography in the Enlightenment is to reconsider the geography of the Enlightenment. Geography is a system of knowledge that takes the graphic arts as its primary tools (a fact made evident by its original Greek suffix, graphia) and remains foundational to how the world is described, analyzed, and controlled. One of the defining characteristics of the European Enlightenment was its dependence on geographic thinking. Jean le Rond d'Alembert, co-editor of the Encyclopédie, defined his magisterial publication as "a kind of world map."

Although the once commanding prominence of geography as an academic discipline seems to have waned today (Harvard, for instance, disbanded its program in 1948), the field has covertly remained an apparatus of power. For example, communities in the United States still feel the effects of redlining, a discriminatory federal policy that used complex socioeconomic data projected onto maps to deny mortgage loans to underrepresented groups in the wake of the Depression. In recent years, increasing attention has been paid to critical geography, a branch that seeks to root out inequality and promote social change. The Decolonial Atlas, a project founded in 2014, creates thematic maps with renamed and redrawn borders that debunk the presumed neutrality of geographic practice.² Even the visual form of maps has been called into question: as recently as March 2021, astrophysicist J. Richard Gott proposed a new double-sided map that presents the world in two disks, an attempt to fix distortions in the ubiquitous Mercator projection.3 Through a critical lens, this essay charts the primacy of the graphic arts in geographical thinking and foregrounds the hidden systems of mythmaking embedded in the discipline.

The vast purview of geography is encapsulated in the subject's entry in the Encyclopédie, which includes Natural, Historical, Civil and Political, Sacred, Ecclesiastical, and Physical subsections. 4 Geography served as a philosophical awning as well, even spurring French publisher and writer Charles-Joseph Panckoucke to produce extensions of the Encyclopédie under the subheadings Géographie ancienne and Géographie moderne. The discipline's popularity among philosophers is acutely lampooned in Gabriel Jacques de Saint-Aubin's drawing of a dinner party in which the host uses a compass and scalpel to carve up a roast capon served in the armature of a globe (Fig. 1). Here, the era's vociferous appetite for cartographic, scientific, and geographic knowledge leads the guests to consume geography itself .5 The potency of this image is underscored in James Gillray's well-known satirical cartoon The Plumb-Pudding in Danger (1805), which depicts British prime minister William Pitt and Napoleon Bonaparte cutting up a globe-shaped plum pudding—an obvious allegory of the conflict between the two nations' imperialistic ambitions.

The globe, a ubiquitous stand-in for geography conspicuously featured in Augustin Pajou's portrait of famed naturalist Georges-Louis Leclerc, Comte de Buffon (see p. 163), takes on a subtler character in John Brown's The Geographers (Fig. 2), a grisaille drawing of men poring over a blank portfolio. Their slumped posture—far removed from the expected physicality of an explorer-cartographer—is comparable to the agonizing psychological topography immortalized in Francisco Goya's El sueño de la razón produce monstruos (The Dream/Sleep of Reason Produces Monsters; p. 106). The link between geography and philosophy is further reinforced by the teachings of German philosopher Immanuel Kant, who lectured on geography la Comenti bles constructions , es frequen

Fig. 1 Gabriel Jacques de Saint Aubin (1724-1780), The Instructive and Appetizing Meal: Voltaire and Three Dinner Companions(2), 1778. Black and brown ink and gray wash on off-white antique laid paper, 18.5 × 15.2 cm. Harvard Art Museums/Fogg Museum, Gift of Charles E. Dunlap, 1955.189. (Detail on p. 77.)

more times than on any other topic in his lifetime (including forty-nine lectures between 1756 and 1796). Incidentally, these were his most popular and best-attended courses. For Kant, geography, together with anthropology, was a core building block of knowledge, central to his students' education. Brown's drawing captures this inherent paradox of geography, a metaphysical discipline built on its graphic by-products.

While cartography, the science of mapmaking, is one of the primary branches of geography, examining the business of creating, disseminating, and consuming maps reveals that they were far from objective mirrors of the visible world. In the eighteenth century, Paris and London supplanted Amsterdam as capitals of the European map trade.⁷ Just as the historiography of the Enlightenment has been Frances. Francocentric, John Brewer has demonstrated that geographic textbooks available to the reading the reading public in this period were statistically centered on France. The Cassini

Fig. 2 John Brown (1749–1787), The Geographers. Gray and black ink, gray wash, and graphite, sheet: 18.1 × 25.7 cm. Yale Center for British Art, New Haven, Conn., Paul Mellon Collection, Biog7714-4152.



family further positioned Paris as the epicenter of cartography via their *Carte de France* (1750–1815), a colossal endeavor printed on 182 separate sheets and identified as the first complete cartographic survey of a nation using triangulation. Maps were essential to how the Bourbon monarchs consolidated power throughout the century; for example, all provincial maps were amassed and corrected under Louis XIV, which facilitated central governance over economic planning, allocation of natural resources, and even ecclesiastical structure. The impact of maps is particularly evident in the case of the partition of the Polish-Lithuanian Commonwealth. As the territory was divided among Prussia, Austria, and Russia from 1772 to 1795, maps cemented and contributed to the disappearance of national borders, effectively dissolving a nation.

This compulsion for mapmaking extended beyond the terrestrial to the celestial. The most famous case of both is the still-surviving pair of colossal globes—one terrestrial, the other celestial—made by Italian mapmaker Vincenzo Coronelli and gifted by Cardinal César d'Estrées to Louis XIV in 1683. With a diameter of four meters, the terrestrial globe was embellished with visualizations of travelers' accounts and allegories that exalted the cartographic reach of the French empire, while the celestial globe memorialized the constellations on the king's birthday. O Across the Channel, John Russell's drawings of the moon (see p. 250) and George Smith's map of a solar eclipse (Fig. 3) demonstrated a similar preoccupation with the celestial plane. The latter improved on eclipse maps by Edmond Halley (he of the famed comet). Bordered by twenty-four vignettes of the phenomenon in various cities, including Cork, Vienna, St. Petersburg, Boston, and Jerusalem, the image unites disparate geographies through their view of the sky. II

This new spatial understanding prompted renewed interest in sacred, classical, and fantastical geographies. Notable early modern exemplars include representations

of paradise in *mappae mundi* and Sandro Botticelli's infamous map of hell from Dante's *Inferno*. Frenchman George Psalmanazar launched an elaborate hoax in early eighteenth-century London by posing as a resident of Formosa (present-day Taiwan) and publishing *An Historical and Geographical Description of Formosa* (1704), later revealed to be entirely fictitious and thus replete with proto-Orientalist fantasies. Fictional geography in literature was largely facilitated by printed maps. For example, the first edition of Jonathan Swift's *Travels into Several Remote Nations of the World* (1726), better known as *Gulliver's Travels*, included five maps of the countries invented for the novel. Such prints endow the tales with a veneer of authenticity—a strategy previously used in Thomas More's *Utopia* (1516), which featured a woodcut map of the titular island—and interrogate the symbiotic relationship between fiction, truth, and (geo)graphic production.

How were maps made and studied? Geographical instruction unfolded on both domestic and institutional levels. In France, the École royale des ponts et chaussées was specifically established to promote cartography, and French architects and artists alike found the study of geography in their respective Académies indispensable to their artistic training. 12 The growing prevalence of overseas exploration prompted a geographic interest within the upper classes, inspiring the publication of maps, textbooks, and games. A key example of the last is a puzzle map of Asia by John Spilsbury (Fig. 4), who is often credited as the inventor of jigsaw puzzles. Initially called dissected maps, these early jigsaw puzzles were essentially engravings of maps pasted onto thin slivers of mahogany and cut along national borders. Spilsbury's maps of European countries, continents, and ancient geographies proved immensely popular and helped animate a subject previously learned through rote memorization. Around this time, John Jeffreys in London is attributed with inventing the first board game that had a map for a playing surface—a revision of the popular "Game of the

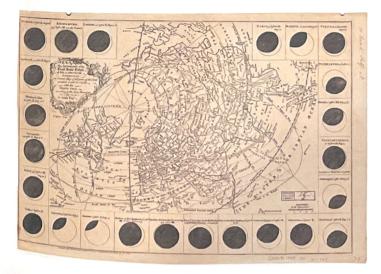


Fig. 3
George Smith (1700–1773), The geography of the great solar eclipse of July 14 MDCCXLVIII: Exhibiting an accurate map of all parts of the Earth in which it will be visible with the North Pole according to the latest discoveries, 1748. Engraving, 30 × 44 cm. Harvard Map Collection, Gift of J. Lovering, Mar. 13, 1849, MAP-LC G3211.B1 1748.S6.

Goose," but with nationalistic undertones.¹³ Jane Austen illustrated the relevance of geographic games as a way of distinguishing the educated set in *Mansfield Park* (1814), in which the protagonist's cousins mock her inability to assemble a jigsaw puzzle map of Europe.¹⁴

This cartographic sensibility pervaded landscape compositions of the era. A prime instance may be Paul Sandby's landscape drawings and prints after them. These sheets are indelibly tied to his role as chief draftsman for the Military Survey of Scotland. Established in the wake of the Jacobite rebellion of 1745, this survey sought to systematically map Scotland as part of an overt political strategy to establish peace in the region by laying claim to the land. Sandby's role as surveyor and the exercising of cartography as an instrument of authority are thus imprinted on his later pastoral visions of the English, Welsh, and Scottish countrysides \mathbf{O} .

DRAWING

The eighteenth century was a period of heightened focus on celebrating new canonical destinations for travel and discovery. For travelers embarking on the Grand Tour, visits to classical and geological sites of import were an essential part of the itinerary. The Bay of Naples, another favored stop for eighteenth-century British tourists, is captured with meticulous topographical fidelity in a panoramic watercolor by Giovanni Battista Lusieri (Fig. 5). It is one of three watercolors commissioned from Lusieri by the British envoy to the court of Naples, Sir William Hamilton, as a memento of his stay. Drawn on the spot over a period of two years, the image depicts the view of the bay from Hamilton's residence in the Palazzo Sessa. Previously, the



Fig. 4 John Spilsbury (1739–1769), Asia in Its Principal Divisions, 1767. Engraving and wood in 37 pieces, hand-colored, 44 * 47 cm. The British Library, London, Maps 188v.13.



incredible architectural detail was erroneously attributed to Lusieri's use of a camera obscura or telescope. In fact, this near photographic vista is the product of prolonged observation and the artist's mastery of pure watercolor.¹⁵

Throughout the Enlightenment, geographical knowledge—and the attendant specter of geopolitical engineering—infiltrated everything from the renovations of the gardens of Versailles, to military surveys, to parlor games. In the words of geographer Brian Harley, one of the foundational voices of critical cartography, "maps anticipate empire." Indeed, drawings and prints have abetted rationalizations, disseminations, and consolidations of knowledge complicit in shaping national identities and facilitating geographic explorations founded on the exploitation of Indigenous and enslaved peoples. Parsing the graphic component of geographic production enables us to reconsider the discipline's assumed scientific objectivity and gain fresh insight into its role in accelerating imperialism across epochs and cultures.

The contemporary German artist and filmmaker Hito Steyerl has argued that the "calculable, navigable, and predictable" characteristic of linear perspective in maps facilitated the rise of linear time and the assumption of linear progress. She calls this reinvention of time and space "an additional tool kit for enabling Western dominance, and the dominance of its concepts." Indeed, drawings of the visible world are still often embroiled in assumed scientific objectivity, which has long cloaked a Eurocentrism that defined the geography of the Enlightenment and continues to shape how we envision the globe today.

- In the original French: "une espece de Mappemonde." Jean le Rond d'Alembert, "Discours Préliminaire," in Encyclopédie, ou, Dictionnaire raisonné des sciences, des arts et des métiers, vol. I, ed. Denis Diderot and Jean le Rond d'Alembert (Paris: 1751–65), xv.
- The Decolonial Atlas, https:// decolonialatlas.wordpress.com.
- Joshua Sokol, "Can This New Map Fix Our Distorted Views of the World?" The New York Times, February 24, 2021, https://www .nytimes.com/2021/02/24 /science/new-world-map.html.

Giovanni Battista Lusieri (c. 1755–1821), A View of the Bay of Naples, Looking Southwest from the Pizzofalcone towards Capo di Posilippo, 1791. Watercolor, gouache, graphite, and ink on six sheets of paper, 101.8 × 271.9 cm. J. Paul Getty Museum, Los Angeles, 85 GC.281.

Fig. 5

4. Didier Robert de Vaugondy, "Géographie," in Encyclopédie, ou, Dictionnaire raisonné des sciences, des arts et des métiers, vol. 7, ed. Denis Diderot and Jean le Rond d'Alembert (Paris: 1751– 65), 613.

83

- The bird is identified as a capon in Sarah Grandin, "Knowledge," in Drawing. The Invention of a Modern Medium, ed. Ewa Lajer-Burcharth and Elizabeth M. Rudy (Cambridge, Mass.: Harvard Art Museums, 2017), 274.
- Stuart Elden and Eduardo Mendieta, eds., Reading Kant's Geography (Albany: State University of New York Press, 2011), 1.
- 7. David Woodward, Maps as Prints in the Italian Renaissance: Makers, Distributors and Consumers (London: British Library, 1997), 89; and Mary Sponberg Pedley, The Commerce of Cartography: Making and Marketing Maps in Eighteenth-Century France and England (Chicago: University of Chicago Press, 2005).
- John Brewer, The Pleasures of the Imagination: English Culture in the Eighteenth Century (London: Routledge, 2013), 144-45; and Daniel Roche, France in the Enlightenment (Cambridge, Mass.: Harvard University Press, 1998), 20.

- David Buisseret, Monarchs,
 Ministers, and Maps: The Emergence
 of Cartography as a Tool of
 Government in Early Modern
 Europe (Chicago: University of
 Chicago Press, 1992), 99.
- 10. The globes remained on display in the King's Library. See their inclusion in the building's plan in the Recueil des Plans des Maisons Royales du Département de Paris 2, now in the Morgan Library & Museum in New York (1955.12).
- 11. Smith published a short pamphlet to accompany the map, A dissertation on the general properties of eclipses; and particularly the ensuing eclipse of 1748, considered thro' all its periods (London: 1748). He previously published eclipse maps in the Gentleman's Magazine, which circulated these specialized diagrams to a wider audience.
- 12. Christian Michel, The Académie Royale de Peinture et de Sculpture: The Birth of the French School, 1648-1793 (Los Angeles: Getty Research Institute, 2018), 91; Jacques-François Blondel's Cours d'architecture, particularly De l'utilité de joindre à l'étude de l'architecture (Paris: Veuve Desaint, 1771), 39-40; and Josef W. Konvitz, Cartography in France, 1660-1848: Science, Engineering, and Statecraft (Chicago: University of Chicago Press, 1987).

- 13. Jeffreys's game, A Journey through Europe; or, The Play of Geography (1759), is a precursor of the now popular board game Risk. Diane Dillon, "Consuming Maps," in Maps: Finding Our Place in the World, ed. James R. Akerman and Robert W. Karrow (Chicago: University of Chicago Press, 2007), 338-41.
- Jane Austen, Mansfield Park,
 vol. I (London: T. Egerton, 1814),
 33.
- 15. Carlo Knight, "Hamilton's Lusieris," The Burlington Magazine 135 (1085) (1993): 536– 38; and Aidan Weston-Lewis et al., Expanding Horizons: Giovanni Battista Lusieri and the Panoramic Landscape (Edinburgh: National Galleries of Scotland, 2012), 29, 97–100.
- 16. John Brian Harley, "Maps, Knowledge, and Power," in The Iconography of Landscape: Essays on the Symbolic Representation, Design, and Use of Past Environments, ed. Denis Cosgrove and Stephen Daniels (Cambridge: Cambridge University Press, 1988), 288.
- Hito Steyerl, "In Free Fall:
 A Thought Experiment on Vertical Perspective," e-flux 24 (April 2011).

SPOTLIGHT 4

René Lhermitte Plan, Profile, and Layout of the Ship La Marie-Séraphique from Nantes, France