Fugitive Colours

Shamans’ Knowledge, Chemical Empire, and Atlantic Revolutions

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His dress was exactly like that of the Indians, consisting only of a piece of linen cloth, disposed round his middle; his hair hanging in natural ringlets down his back…. He possessed a library of well chosen books, on history, philosophy, arts, and sciences; a small collection of the most necessary simples in the Materia Medica; and a portable furnace, with utensils fitted for most of the operations of chemistry as he employed a part of his time in experimental researches into that noble science…. I was led into a dark room and made to observe an electrical apparatus, which was kept ceremoniously covered over; this, with some of the most surprizing phenomena of chemistry and natural magic, he gave me to understand, that he sometimes used among the Indians, to inspire them with a belief of his being possessed of an unusual degree of knowledge, and a supernatural power.

The history of Charles Wentworth, 1770

Introduction: Playing the Shaman

The scene described above stages the central theme of this essay: the making of knowledge in milieux forged by intercultural and transnational exchanges. In the 1760s, an English fortune-seeker named Charles Wentworth journeyed towards the interior of Guiana in South America, inland from the coastal Dutch settlements. Movement upriver, guided by Amerindian navigators, appeared to approximate movement away from civil society, as orderly colonial planta-
tions gave way to riotous interior forests. Wentworth was astonished, therefore, to encounter Mr. Gordon, an exiled Scotsman, living among the Arawak, and quietly cultivating his garden in the wilderness. ‘We discovered him reading in the shade of a tree before his door,’ Wentworth recalled. ‘The sight of a European reading in the wilds of Guiana, where I imagined a book had never been seen, was both unexpected and agreeable.’ Gordon for his part exhibited a placid inscrutability on being found; he ‘appeared surprized but pleased with our visit.’ After showing Wentworth his collection of experimental apparatus, he made a momentous declaration: even the ‘Peii’s’—the Arawak shamans or medicine-men—‘have universally yielded me the superiority’ as master of the powers of nature.

One small caveat attaches to this scene: Wentworth and Gordon did not exist. They were characters in an epistolary novel published in London in 1770 by an American traveller, naturalist and man of letters named Edward Bancroft (Figure 1). This fictitious scene re-assembled elements—experimental apparatus, colonial travel and indigenous knowledge—from one context of Bancroft’s life for strategic deployment in another. Playing with names, for example, was a key instrument of movement and transformation. Charles Wentworth was named after one of Bancroft’s patrons, the New-Hampshire planter and agent Paul Wentworth, whom he had met in Guiana and who persuaded him to become a British spy in the American Revolution. The manipulation of experimental apparatus is especially striking. Elsewhere I have described how Bancroft’s experiments with Guiana eels became linked with metropolitan programs of research on the electricity of torpedo fish and the construction of artificial batteries, modelled on the organs of such creatures. This essay shifts focus to what Gordon called ‘the most surprizing phenomena of chemistry.’ His mimicry of shamanic powers, using experimental apparatus, was in fact a fanciful sublimation of the project Bancroft himself was to pursue for most of his life: the attempt to use chemical techniques to convert American dyestuffs into experimental, philosophical and lucrative financial resources.

Bancroft is known mostly as an inglorious footnote in the historiography of the American Revolution, as a traitor who covertly reported French-American negotiations in 1770s Paris back to British paymasters in London. Most scurrilous of all is the oft-repeated yet unproven allegation that he used his extensive knowledge of Guianese poisons to murder his senior colleague Silas Deane, who may have been on the verge of exposing him. In the utterly unrelated historiographies of chemistry, colour and light, meanwhile, Bancroft

makes a cameo appearance as an advocate of the chemistry of Antoine Laurent Lavoisier and Claude-Louis Berthollet in 1790s London, and as an opponent of long-standing (if also long-debated) Newtonian conceptions of colour as a function of the physical modification of light by the micro-structures of material bodies. The obvious point of contrast in both historiographies is the

FIGURE 1  Portrait of Edward Bancroft, n.d.: the colonial traveler, plantation doctor, trafficker, writer, spy and master of dyes, invisible inks and poisons, adopts the guise of the philosophical gentleman. © The Royal Society.

4 Alan E. Shapiro, Fits, passions, and paroxysms: physics, method, and chemistry and Newton's theories of coloured bodies and fits of easy reflection (Cambridge: Cambridge University Press, 1993), pp. 268–278; Barbara Whitney Keyser, 'Between science and
career of Benjamin Franklin who, despite his genteel imperial service, successfully improvised a new American identity for both his politics and his science in the 1770s. While the inventor of the lightning rod secured national immortality by donning a coon-skin cap in the name of liberty and Creole pride, Bancroft was a loyalist, profiteer and exile, seemingly doomed to historical oblivion—hence the nineteenth-century anecdote about his papers being burnt by an American descendant in suitably patriotic shame.

In keeping with the theme of this book, this essay pursues the task of relating these two sets of concerns: the geopolitical and the techno-scientific. The value, indeed necessity of focusing on go-betweens who cross cultural, national and disciplinary boundaries lies precisely in showing how such realms were mutually overlapping rather than separate. Instead of assuming the inevitability or integrity of the American revolution—or, for that matter, the so-called Chemical Revolution—it explores the fluid movements back and forth between different regimes of political allegiance and knowledge-making that much better characterize Bancroft’s Atlantic revolutionary turns. Even fluid categories that denote interloping, mediation and identity-shifts such as ‘go-between’ and ‘passeur’ require careful handling. Go-between, for example, has often been used to identify diplomatic brokers, often between radically distinct cultural groups, who gain credit by openly displaying their virtuosic ability to translate between such groups, even to embody a blend of cultural elements from different groups. Passeurs, on the other hand, might be seen as figures who suppress their foreign or hybrid identities to gain credibility and trustworthiness in the performance of a single, seemingly local role. Still others play the stranger: they maintain their foreignness as a visible asset to seek credit as unique informants about remote geographies. Such categories and behaviours often intersect and overlap as well. Historians of scientific selfhood have examined regimes of epistemological self-construction as the products


of specific knowledge-making practices. But, as David Turnbull suggests, the figure of the trickster provides a valuable model for understanding the cunning arts of shape-shifting that often accompany, if not enable trafficking in knowledge, especially across significant geographical and cultural distance. Such ‘jokers’ trade fundamentally on deception, often revealing only one face at a time, and are above all experts at managing transitions between personae.

Gordon’s declaration of power over superstitious ‘Indians’ epitomized European ambitions to neatly expropriate the materials and skills of another singular mediating figure: the shaman. Shamans, often referred to as medicine-men or priests by travellers, embody an alternative, indigenous tradition of the go-between besides that of the trickster as conceived in the western imagination. For countless generations, the Amerindian shamans of the Amazonian regions of South America have acted as brokers between human communities and spirit realms. As such, they transcend and transform: their communication with spirits (both benign and destructive) often requires the use of hallucinogens to produce trance-states for perceived transformations into divine animal spirits, especially birds, affording access to multiple planes of existence. Through combined mastery of spirits, pharmacopoeia and animals, shamans heal and, as Neil Whitehead has shown for the Guianese tradition of kanaimà, they attack. As the penetrating fieldwork of Eduardo Viveiros de Castro and others argues, distinctions between human, animal and spirit realms—indeed, between the very categories of internal and external—are conceived as fluid in their cosmologies, which emphasize related and transitional phases of human existence and the naturalness of transformation.

By passing between mundane and spirit realms, shamans are thus the vital cosmological actors in their cultures. More recently, they have also become models of cultural revival, providing inspiration to Guianese artists seeking to respond to ancestral erosion produced by colonial histories of enforced missionary conversion. The Arawak sculptor Oswald Hussein, whose 1998

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sculpture Likisa (that which makes you shiver) models Janus faces of human/spirit and jaguar/anaconda (Figure 2), explicitly invokes the shaman’s powers, both light and dark, to model the artist as a cultural and political mediator fashioning latter-day zemis.¹⁰

Who exactly are the historical agents of the much-invoked relation between ‘science and empire,’ and how are reciprocal connections between the

¹⁰ Zemis or Cemis are carved stone objects that convey spiritual authority in Taino religions. Amazon to Caribbean: early peoples of the rainforest (London: Horniman Museum, 2005), and private communication with Hassan Arero; on colour in shamanic experience, see Michael Taussig, ‘What colour is the sacred?’ Critical inquiry 33 (Autumn 2006): 45–46.
resources of empire and the techniques of the sciences actually forged? How, moreover, do go-betweens constitute and reconstitute their authority as they move across radically different cultural zones? Tracing the itineraries of figures like Bancroft is useful to reframe traditional accounts of knowledge-making by denying its products nationally defined narrative destinations (‘American science,’ ‘British science,’ etc.) and focusing instead on the opportunities, techniques and problems occasioned by geographical displacement itself. In so doing, the possibility of linking late eighteenth-century histories of intercultural travel, political revolution, industrial speculation and experimental innovation emerges. In what follows, three distinct phases of Bancroft’s career are examined: as a naturalist in Guiana during the 1760s; as a writer, editor, diplomat and double agent in London and Paris during the American Revolution; and as an importer, projector and philosophical chemist in London in the post-revolutionary period. Three major themes emerge, connecting all three phases: the pursuit of colour from the context of ethnographic exchange in Guiana to the practice of chemistry in the transatlantic dyestuff trade; the relation between sensory knowledge and theoretical understanding across genres of natural history and experimental philosophy; and the crafting and re-crafting by an American Creole of a knowledgeable persona in movement back and forth between Guiana, London, Paris and Philadelphia. Bancroft’s opposition to Newtonian optical theory cannot be divorced from the work he carried out to advance his fortunes in the dyeing business, which in turn has its roots in his exposure to American flora while among the indigenous peoples of Guiana. Similarly, his movements in the diplomatic and political networks of revolutionary London and Paris were not simply the activities of an ingenious spy, but the manoeuvrings of a profiteer seeking patronage and investment for his chemical projects. Like the shaman whose mastery of drugs, dyes and poisons he sought to emulate, Bancroft’s goal was transcendence and transformation, from journeyman Creole traveller to would-be master of a personal chemical empire. Gordon’s task among the Arawak was thus the refracted image of his own object among the commercial and philosophical denizens of Enlightenment London: ‘to inspire them with a belief of [my] being possessed of an unusual degree of knowledge.’

TECHNIQUES OF SENSUOUS TRAVEL

Bancroft’s Guiana of the 1760s was a congeries of unstable alliances and contests among a number of European powers and Amerindian peoples, both of which interacted with large numbers of enslaved Africans, who repeatedly sought their freedom through uprisings and the establishment of maroon communities. The region had long tantalized the English imperial imagination, ever since Walter Raleigh had laboured to find the golden city of El Dorado in the late-sixteenth century and create a beach-head in the Iberian-dominated
It was, however, the Dutch who established the more significant presence, under the auspices of the Dutch West India Company. Bordering to the east by Cayenne and French Guiana, to the west by Nueva Granada and to the south by Portuguese Brazil, Dutch Guiana was composed of the settlements of Demerara, Essequibo, Berbice and Surinam. Rocked by raids from French privateers and the Anglo-Dutch wars of the mid-seventeenth century, they were taken by the English in the 1660s, only to be returned in exchange for New Amsterdam in 1664 (the Dutch would officially cede the colony back to Britain in 1814). As attempts to enslave natives failed, the Dutch began importing Africans to exploit the fertile coastal lands through sugar and rum production, which surpassed the cotton, cocoa and tobacco crops after the 1740s. Violent rebellions ensued, however. One of the largest occurred in Berbice in 1763 where, according to one estimate, 346 whites attempted forcibly to govern 3833 Africans. Military suppression drew on a pragmatic alliance with British planters from the Caribbean, who had long been invited to invest their capital and expertise in sugar (‘colonization by indulgence’ was how Bancroft described such violations of mercantilist nationalism). Before Dutch ships from Curaçao and St. Eustatius could reinforce the Dutch-indigenous alliance seeking to put down the rebellion, a British warship carrying Gedney Clarke, the Customs Collector at Barbados who moonlighted as a Demerara plantation-owner, arrived with an armed force. Several hundred Africans were hanged or broken on the wheel in the rebellion’s aftermath. Colonization depended on alliances with Amerindian nations (Figure 3). The decisive early axis linked Spanish colonizers with the Arawak, in an exchange of metal goods, slaves and Christianity for provisions and military

11 Bancroft recounted alleged local fables of indigenous fealty to English masters: ‘The Carribbee Indians are at perpetual variance with the Spaniards, and frequently commit hostilities on their settlements at the River Oronoque. They retain a tradition of an English Chief, who many years since landed amongst them, and encouraged them to persevere in enmity to the Spaniards, promising to return and settle amongst them, and afford them assistance; and it is said that they still preserve an English Jack, which he left them, that they might distinguish his countrymen. This was undoubtedly Sir Walter Raleigh, who, in the year 1595, made a descent on the Coast of Guiana, in search of the fabulous Golden City of Manoa del Dorado, and conquered Fort Joseph on the River Oronoque.’ Edward Bancroft, An essay upon the natural history of Guiana, in South America (London: T. Becket and P. A. De Hondt, 1769), pp. 258–259.


13 Bancroft, Natural history of Guiana (cit. n. 11), p. 380.

assistance. In the seventeenth century, the Dutch began a competing arrangement with the Caribs. Dutch trading posts offered rum and tools such as axes, knives, and razors in return for hammocks, woods, and dyes. Colour was a key commodity. The Caribs’ red Annatto dye was the most prized trading good of all for the Dutch, who traded 200,000 machetes for 335 tons of Annatto between 1700 and 1740 alone, an exchange that enhanced the standing of both groups. These parallel agreements set up a dynamic of mutual assistance but also mutual military implication, of the kind Richard White has described for indigenous-French-English relations in the Great Lakes region of North America during the long eighteenth century. With no one group dominant on this ‘middle ground,’ alliances facilitated trade and military assistance for Amerindians and Europeans alike but also implicated them in each other’s wars. In Guiana, the Carib alliance offered the Dutch crucial support against the Spanish, African rebels and hostile indigenous groups, but also threatened embroilment in local native conflicts. The Dutch dilemma was to restrict the Carib trade to exclude guns, so that Carib offensives against rival groups like the Warao and Akawaio would not trigger an onslaught from their Spanish allies. Such alliances were treacherous to maintain, however, because native groups did not negotiate as centralized political blocs. Hence, by the 1760s, new relations had emerged between some Arawak groups and the Dutch, complicating previous alignments. Essequibo Governor Laurens Storm van ’s Gravesande’s letters to the Dutch West India Company in the mid-eighteenth century reveal both the anxieties of this alliance and the technologies of intelligence-gathering used to fight for survival. ’s Gravesande, nephew of the Leyden experimental philosopher Willem, wrote home of sending ‘wanderers’ and ‘Creoles’ (in this case meaning loyal free blacks) upriver to spy on Carib and Spanish activities, and lamented the prospect of having to fight wars due to ‘the indiscretion of some itinerant traders and avaricious settlers, who, without taking any heed of the consequences allow themselves to be drawn into these quarrels upon the slightest inducement of profit.’

Into this volatile zone, crisscrossed by go-betweens and interlopers of all kinds, arrived the nineteen-year-old Edward Bancroft in 1763. As figures who move repeatedly between contexts, go-betweens become specialists not of one domain or genre of knowledge, but deal in multiplicity and develop formidable arts of connection. Auto-didactism, improvisation and ingratiation were the talents that set Bancroft’s life in motion. Born in Westfield, Massachusetts in 1744, Bancroft lost his father at the age of two before growing up to become apprenticed to the physician Thomas Williams in Killingworth, Connecticut, as well as tutored by the future diplomat Silas Deane. Evidently in flight for having stolen from his mentor Deane, Bancroft abruptly took himself off to

16 Whitehead, Lords of the tiger spirit (cit. n. 12), pp. 9–20, 151–168.
sea in 1763, sailing for Barbados, where he failed to find work—a sequence he later fictionalized in Charles Wentworth—continuing on to Guiana and settling near the Demerara River, from where he made the following report to his erstwhile master Williams:

I had the good fortune immediately upon my arrival to ingratiate myself into the esteem of some gentlemen of note ... by whose recommendation, added to that of a celebrated physician, from Edinburgh, I obtained in three days after my arrival the employment of surgeon to a gentleman of fortune, owner of two large plantations and near two hundred slaves in this river.... by him I am treated as a companion, I sit at his table, share his diversions and in short lead a very agreeable life. I have all my medicines found me from London and in such quantities as I direct, am allowed a servant to attend me, a nurse to administer my prescriptions. My practice being at the door serves rather as an amusement, than a toil. By an intimate acquaintance with the afore named physician I have a good library at command.¹⁷

This was perhaps a suspiciously glowing report from a youth seeking to justify the abandonment of his apprenticeship; he also mentioned that he thought he could save £100 in the first year alone, and start building a considerable fortune. Nevertheless, the letter does reveal the social and intellectual dynamics of Bancroft’s situation in moving from New-England to Guiana. As a ‘surgeon’ in the service of the plantation system, his duties would have been practical in character, although in colonial contexts labels like ‘surgeon’ or ‘physician’ were especially plastic and imprecise, combining a wide range of skills. But Bancroft also pointed out how his skills of ‘ingratiation’ had established him in the confidence of local gentleman-planters, securing him privileged status, including assistants to work for him and access to a library for his improvement and diversion.¹⁸

¹⁸ The physician’s identity is unknown, but the gentleman may well have been Paul Wentworth: see the next section. On the blurred distinction between physician, sur-

FIGURE 3 An indigenous map of Guiana, showing probable locations of native peoples, c. 1600: ‘Dutch’ Guiana was in fact a lattice-work of volatile alliances stitched together by Dutch settlers among numerous native peoples, as a defense against the threat of Spanish raids and slave rebellions. Courtesy: Neil Whitehead.
Bancroft thus commenced a three-year period of residence in Guiana until 1766, during which time he began work on his *Essay on the Natural History of Guiana*, later published in London in 1769. Interestingly, what Bancroft later emphasized in print was not the ‘agreeable’ life of ‘amusement’ he enjoyed from his position within the plantation complex but the difficulty of life and work in Guiana: the obstacles to making curious knowledge and especially the dearth of auxiliary materials (including books) to execute proper botanical studies. In the *Natural History*, Bancroft assumed the voice of an anonymous knowledgeable traveller rather than a privileged local resident, submerging both his American provenance and personal situation as a plantation doctor. Knowing Guiana depended on techniques for negotiating a hot, humid, densely forested and highly dangerous environment. As prudent management of sensory experience contended with the conditions of a potentially overwhelming tropical landscape, practical exchanges with enslaved Africans and indigenous Americans promised solutions to the perennial colonial puzzles of labour, language and navigation.

On the plantation, African slaves seemed ideal naturalist-labourers; not, according to Bancroft, as knowledgeable informants, but as assistants whose slave status made them useful ‘hands’ for the work of specimen-collection. ‘Agriculture, and all other labour, in these colonies, is almost wholly performed by Negroes,’ he explained, ‘as the white Inhabitants undertake no laborious employment; and even the mechanics do little more than oversee and direct the Slaves.’ Turning slaves into botanical labourers was not uncommon: ‘several persons in this Colony advantageously employ themselves, with their slaves and dependents, in killing and preserving Birds for the Cabinets of Naturalists in different parts of Europe.’19 Snake-collecting was embedded in the hazardous work routines of plantation life, not infrequently with lethal results. Bancroft described, for example, the agonizing death of an African carpenter by snake-poison while working amidst snake-infested timber. The internal workings of the plantation economy provided both opportunity and recompense. ‘To procure a sufficient number of these objects, I give the Negroes, of all the neighbouring Plantations, a glass of rum for each snake which they accidentally kill, and bring to me, whether it be fit for my purpose, or not, of which they are not able to judge.’ He boasted a collection of some three hundred of the ‘most lively colours,’ carefully preserved in rum, a much cheaper commodity in Guiana than in Europe.20

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Bancroft lacked the skills or inclination to engage in a strictly nomenclatural project of flora-recognition that divorced specimens from their social contexts, a mode that has been seen as the dominant one in Linnaean classification and enlightened natural history more generally. By contrast, he both apologized for and advertised the unsystematic character of his chorographic descriptions of the nature and peoples of Guiana. Far from erasing social presence, the *Natural History*’s descriptive orientation foregrounded scenes of intercultural exchange, emphasizing the interloper’s heroic response to the material difficulties of travel, cognition and extraction. Learning seemed cursed by the environment itself. Bancroft noted, for instance, that the colonists continually found centipedes and scorpions crawling among their books, boxes and furniture. Contradicting his earlier letter to Williams, he now professed his ignorance of botany, regretted his lack of skill as a draughtsman and claimed to have been ‘destitute of books, by which I might correct my errors, and elucidate my ideas’ during research and composition. In this completely un-illustrated text, Guiana was translated wholly into words. But words, language itself, was a central problem in accessing local knowledge. Bancroft reported that ‘a species of corrupt *English* is universally spoken by the Negroes,’ yet when an African woman was bitten by a scorpion, she was ‘unable to communicate her complaints in any language intelligible to an *European*.’ To access local accounts ‘of the properties, and effects of several classes of animals, which experience, during a long succession of ages, must have suggested to these natives,’ Bancroft turned to interpreters. In *Charles Wentworth*, which drew heavily from his own experience, Bancroft described his narrator travelling upriver on a large, tented river-barge called a ‘yacht’ in a company of Amerindian huntsmen and African slaves, among them a native whose many former captivities had given him unique skills in several local and European languages. It was this caravan of interethnic linguistic, navigational and provisioning skills that moved Bancroft beyond the plantation world; solitary travel and ‘discovery’ would have likely meant certain death. Intercourse via the ‘imperfect medium’ of translation was ‘confined, precarious, and disagreeable,’ however. Authoritative reportage of interior travel and local knowledge was thus carefully tempered with strategic disclaimers regarding the uncertainties of mediation.

24 Bancroft, *Charles Wentworth* (cit. n. 1), 2: 214. When their ‘yacht’ is replaced with a narrow canoe-like ‘creaul,’ the group is ‘pulled forward against the descending stream with great dexterity, by the Indians, who are habituated to this’ (2: 226). See also Bancroft, *Natural history of Guiana* (cit. n. 11), p. 376.
Beyond the plantations, a wealth of natural commodities awaited the adventurous traveller. Traffic in interior commodities required indigenous negotiation and, in the absence of specific instruments for experiment or specimen-preservation, keen management of sensory experience as the basis for persuasive reporting.\(^\text{26}\) Integral to Bancroft’s authoritative self-construction as an exotic voyager, moreover, was a comparative reckoning of the sensory knowledges of Amerindians and travellers like himself. The most obvious stance Bancroft adopted was to dismiss non-European authority. The very traffic in goods that established cross-cultural relations signalled the poverty of indigenous judgment: they ‘may be hired with a few baubles for several months.’\(^\text{27}\) They lacked writing and, while they marked different periods, possessed no method of computing time. They were knowing, yet unknowing, materially skilled and locally knowledgeable, but unable to translate that knowledge: ‘intirely ignorant of Letters, they are unable to comprehend the manner in which they observe the knowledge of things communicated by their assistance.’\(^\text{28}\) Their hunting and agricultural prowess obviated the need for curiosity beyond themselves. Amerindians precisely lacked the skills of the go-between to recognize, manage and bridge cultural difference. When natives did report, their passionate imaginations ran amok. Accounts of apes known as ‘wild men’ were fabulously exaggerated by ‘the fears of the Indians.’ ‘Shew an Indian a snake,’ Bancroft complained, ‘and ask him the consequence of its bite, and if he is wholly ignorant of the matter, he will nevertheless answer, Abwauga, which signifies, that it is bad, or dangerous; if the word Mansaga is joined thereto, which puts it in the superlative degree, I then judge he has some knowledge of it, and that it is reputed fatal.’\(^\text{29}\) In so writing, Bancroft identified himself as possessing unique skills of discernment that redeemed indigenous contact as the basis for his own authoritative account of Guiana. He, uniquely, could translate the sound and fury of indigenous testimony.

Historians of the sciences have rightly emphasized both the authority of the senses in eighteenth-century experimental discourse and also sensory discipline as a problem in exotic settings, where scientific instruments came to promise an especially attractive solution by de-personalizing and rendering precise the production of local information.\(^\text{30}\) Bancroft himself emphasized the theme of sensory disorientation in Guiana, though not always negatively.


\(^{27}\) Bancroft, *Natural history of Guiana* (cit. n. 11), p. 374; on colonizers’ views of Amerindian knowledge, see also Parrish, *American curiosity* (cit. n. 20), chap. 6.

\(^{28}\) Bancroft, *Natural history of Guiana* (cit. n. 11), pp. 334, 332.

\(^{29}\) Bancroft, *Natural history of Guiana* (cit. n. 11), pp. 130, 221.

\(^{30}\) Roberts, ‘Death of the sensuous chemist’ (cit. n. 26); Marie-Noëlle Bourguet, Christian Licoppe, H. Otto Sibum, eds., *Instruments, travel and science: itineraries of preci-
Heroic sampling threatened the experimental judgment of the traveller: ‘handling, smelling, [and] tasting’ different plants often left his senses ‘disordered or violently affected.’ At the same time, he confessed, the sheer sublimity of Guiana’s impenetrable forests, where the liberal hand of indulgent Nature has ranged, in beautiful rustic disorder,’ moved him to ‘wonder and admiration.’

In at least one crucial instance, he carefully executed laboratory technique to bring cognitive order to his fieldwork, making a conspicuous virtue of reliance on the senses alone. In his experiments with Guiana eels, Bancroft asserted that a sensational analogy existed between the shocks inflicted by the eel and those delivered from a Leyden jar, suggesting a common source: electricity. He celebrated his lowly status as a peripheral traveller whose senses could correct the errors of remote metropolitan conjecture. His specific target was René de Réaumur’s hypothesis that such fish delivered shocks through imperceptibly swift mechanical action. ‘You may, perhaps, think it an act of presumption in me, to dispute the authority of a man, whose literary merit is so universally acknowledged,’ he announced with improbable confidence, ‘but I am convinced, that an implicit faith, in whatever is honoured with the sanction of a great name, has proved a fruitful source of error in philosophical researches; and whilst I have sense and faculties of my own, am resolved to use them with that freedom for which they were given.’ Bancroft the sensuous traveller won the argument in spectacular fashion: his arguments not only helped demonstrate the electricity of American eels, but prompted successful experiments in Europe on the construction of artificial batteries, modelled on the organs of such fish, for generating a constant electric current.

Sensory experience also counted as a political resource for facilitating intercultural travel. As de Castro and Robert Storrie have argued, physical participation implies identity-transformation and social incorporation in Amazonian cultures. ‘When you eat tapir meat, you become a little bit tapir,’ Storrie’s Venezuelan Hoti hosts informed him. And as Johannes Fabian has demonstrated in the context of nineteenth-century Central Africa, travellers’ willingness to engage in varieties of sensory and bodily experience—such as drinking, eating, taking drugs, engaging in sexual relations and participating in local customs—often proved essential to enable movement through exotic cultural zones. Sensory participation was thus a political technology of travel. Bancroft exhibited his own political acumen as a traveller by recounting from the seventeenth to the twentieth century (London and New York: Routledge, 2002).

31 Bancroft, Natural history of Guiana (cit. n. 11), pp. 57–58.
32 Bancroft, Natural history of Guiana (cit. n. 11), p. 196; Delbourgo, Most amazing scene of wonders (cit. n. 2), chap. 5.
33 De Castro, From the enemy’s point of view (cit. n. 9); Storrie, ‘Equivalence, personhood, and relationality’ (cit. n. 9): 421.
ing his consumption of the drink known as ‘Piworree.’ This was a decoction made by the Akawaio from Cassava Bread (or Manioc), chewed by Akawaio women and fermented with water. ‘It is inebriating,’ he commented; a ‘less agreeable’ form of ale. Nevertheless, he ‘often yielded to their importunity, and drank it at their houses, to avoid giving offence, though I would willingly have dispensed with their hospitality in this particular.’35 Native funerals used Piworree to unleash expressive ritual observation of death: the ‘Piworree is freely dispensed … [in] a ludicrous spectacle of crying, singing, riot, and drunkenness; the old women are particularly noisy and petulant, and distinguish themselves by singing loud songs in praise of the person deceased; and the whole is a confused scene of mirth and sorrow, ridiculously combined in the same object.’36 While glossing such performances as derangements of sight and sound, he nevertheless well recognized the political importance of sensory participation to the progress of his researches.

Its author’s schizophrenic mixture of scorn for indigenous vulgarity and romantic celebration of their primeval innocence notwithstanding, the Natural History also displayed within its pages a studious interest in the materials and craftsmanship of local Amerindian cultures. Bancroft’s rather obvious dismissal of indigenous knowledge was belied by his extremely careful attention to the ways in which native peoples manipulated their natural environments. Such ethno-botanical knowledges were potentially too lucrative to be ignored. Ethnographic exchange, sensory experience, and proto-chemical experimentation converged in a series of encounters and trials that defined the paths of inquiry and investment that Bancroft was to pursue throughout his life. He made careful observations, for example, of the preparations of the Cassava Root, both as food and poison; the poisonous kernel of the Caruna nut, which the Akawaio ‘conceal under their nails, at their meetings, when they intend to revenge an injury, until an opportunity offers of putting it into the drink of the destined victim’; the Hiarree root, used for drugging fish; and, most notably, ‘Woorara’ (the notorious Curare).37 Bancroft claimed direct shamanic provenance for this Akawaio poison, used on arrow-tips to paralyze prey in hunting and war, which he ‘procured from several of their Peii’s, or physicians,’ while also demonstrating his ethnological grasp of the intricacies of its deployment in revenge attacks.38 Mentioning recent experiments that had tested a variety of poisons on animals, he politely informed his readers that he had brought ‘a considerable quantity of this poison to England

35 Bancroft, Natural history of Guiana (cit. n. 11), pp. 278–279.
36 Bancroft, Natural history of Guiana (cit. n. 11), p. 317.
37 Bancroft, Natural history of Guiana (cit. n. 11), pp. 40–41, 97, 106, 283–288.
38 ‘They always feign an insensibility of the injury which they intend to revenge, and even repay it with services and acts of friendship, until they have destroyed all distrust and apprehension of danger in the destined victim of their vengeance.’ Bancroft, Natural history of Guiana (cit. n. 11), pp. 288, 267–268.
... capable of perpetrating the most secret and fatal villainy,' and had left it on deposit with his publisher Becket on the Strand, to whom 'any gentleman' of experimental persuasion might apply for a sample, provided his 'character ... warrant us to confide in his hands a preparation.' Bancroft thus advertised his unique capacity to deliver the shaman's fiercest weapons as experimental commodities, and his prerogative to demand the trustworthiness of those interested in his exotic wares.  

Bancroft spied the outlines of both his future political and chemical careers literally written on the bodies of Guiana's natives. He described with meticulous care the colour of their 'Arnotta' or 'Roucou Shrub seeds,' which, when macerated in lemon juice and the gum of the Mauna tree, 'yield the celebrated Indian Pigment, or Crimson Paint, with which the Natives adorn their bodies,' and which were so highly prized by Dutch traders. His account of the Mauna Tree attended scrupulously to its colours and colour-changes: its light brown bark, crimson-flowered leaves, and the yellowish gum which, when dissolved in 'aqueous menstruum,' furnished a key ingredient in Indian pigment.  

The Mauna's natural processes of chemical transformation intrigued him above all. Without instruments, using only his skills of observation, Bancroft recorded how the juice of the Mauna fruit

   after being a little time exposed to the air, changes from a whitish to a beautiful deep bluish purple colour, and the internal substance of the fruit being bruised and macerated in water, affords the paint so delightful to the Indians, and which in colour nearly resembles indigo. With this, they ornament their bodies, by drawing a variety of figures, agreeable to the suggestions of a wanton, rustic fancy. These figures, when thus drawn on the skin, are perfectly indelible for the term of nine or ten days, by any art hitherto discovered. When that time is elapsed, they usually begin to disappear, and are soon after invisible. From this fruit, a beautiful ink is likewise made, which, however, in a short time becomes invisible, and is therefore capable of serving many fraudulent purposes; for which reason, its use is prohibited, under the severest penalties.

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41 Bancroft, *Natural history of Guiana* (cit. n. 11), pp. 75–76.
Commercial curiosity here fused simultaneously with ethnographic sensitivity and chauvinism: what they found ‘delightful’ was both ‘wanton’ and more importantly, useful, while also dangerously changeable. This account of impermanent colours and invisible inks was, moreover, a remarkable inventory of the technologies Bancroft was about to employ as he moved from the marchlands of Guiana to the imperial capital London. As we shall see, intercultural travel, metropolitan experiment, and diplomatic espionage were not discrete zones of activity; they formed a connected chain of knowledge, expertise and performance. Interaction with Amerindian cultures not only constructed the authoritative basis of profiteering botanical reportage; it made possible the many careers of the go-between through immersion in native materials and skills.

**REVOLUTIONARY MERIDIAN AND DRAMAS OF ALLEGIANCE**

An important question that repeatedly arises in this volume’s essays concerns how travellers and go-betweens sustain trust and authority across different settings. Self-translation is the necessary skill that allows remote knowledge to yield local advantage in far-away communities. The key for Bancroft to make his Guianese experience tell locally in 1760s London was a program of self-translation that involved both stability and multiplicity: the construction of a stable metropolitan identity as useful resident outsider, specifically in the form of a loyal colonial informant; and multiple translations that reassembled the elements of his colonial experience into different genres of performance: natural history, experimental philosophy, magazine essays, edited books, political pamphlets, novels. Bancroft’s subsequent self-translations of the 1770s, when he became a double agent, involved invisible simultaneous roles as imperial informant and patriotic republican, carefully managed never to appear in the same instant. Such manoeuvres drew on the networks and techniques he had begun to establish in Dutch Guiana. Fortuitous immersion in plantation society helped insert him in metropolitan diplomatic and political networks. Political and scientific networks, moreover, far from distinct, were related and mutually reinforcing. Bancroft could trade on his work as a naturalist for political trustworthiness, while his improving political position provided the foundation for his career as a transatlantic chemical profiteer (discussed in the next section).

After three years’ residence, Bancroft left Guiana in 1766, sailing for Boston and making his way to Hartford, Connecticut, where he most likely settled

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his debt to Silas Deane. He then sailed for London, landing in May 1767, in the midst of the ongoing constitutional crisis between Parliament and the colonies. The Stamp Act had been repealed the previous year, but 1767 would see the implementation of retooled taxation strategies in the form of the Townshend Duties. Bancroft resumed his education on arrival, enrolling as a pupil at St. Bartholomew’s Hospital the following year under William Pitcairn, to whom he dedicated the *Natural History*, before ultimately obtaining a medical degree from Aberdeen in 1774. His brother Daniel, meanwhile—a shadowy figure to whom he repeatedly referred in his published writings—also came to Britain, studying medicine at Edinburgh. Bancroft instantly set to turning his colonial expertise towards brokering relations with scientific and political elites.43 Anticipating the vital role later played in his chemical career by dyeing samples, in April 1772, he sent future president of the Royal Society Joseph Banks the specimen of a preparation for use against a maritime foe highly inimical to British global domination: aquatic worms. ‘Being on the coast of Guiana in the year 1764,’ he explained, ‘I became solicitous [sic] to discover the means of preserving the timber of ships, from the injuries of aquatic worms, which in that country are very numerous.’ His recipe consisted of two pounds of fish oil, one pound of Ceruss (white lead paint), and seven pounds of resin (or, if colour was unimportant, pitch). The compound’s durability was ‘confirmed by my own experiments’ using wooden planks ‘immersed in brackish water, in the River Demerary’ and the River Surinam on a return voyage he’d made in 1769. It showed less propensity to crumble than the standard combination of tar and turps, and it cost less: around £13 per ton, he reckoned, instead of £37. This ‘must necessarily produce very great benefits, to the Navy & Commerce of Great Britain, which are the natural sources of wealth and power.’ He boldly appealed to Banks as a fellow world-traveller in the service of empire, urging him to ‘Decisive Tryals’ with his recipe, ‘which perhaps you may have an opportunity of making in the course of your voyage to the Southern Hemisphere.’ Whether Banks replied is unclear. Bancroft nevertheless remained resolute in pursuit of his quarry. The financially challenged Macedonian linguist John Paradise, who had married the Virginia heiress Lucy Ludwell, wrote to Banks from Williamsburg, Virginia, years later in 1787 that Bancroft ‘kindly undertook to deliver … into your hands’ the dissertation of a Mr. Knight he had borrowed. One way or another, Bancroft was determined to send Banks something useful from paradise.44


44 Edward Bancroft to Joseph Banks, Apr. 13, 1772, 37 Ms. 1684, Gabb Papers, National Maritime Museum; John Paradise to Joseph Banks, Nov. 22, 1787, in *Scientific corre-
The key scientific friendship Bancroft cultivated, however, was that of the former printer, electrical virtuoso, colonial agent and inescapable ‘doctor’ about town—Benjamin Franklin. This was a two-way relationship of intimate trust: Bancroft lived with Franklin at Passy as unofficial secretary to the American delegation in Paris after 1776. How the two met is unclear, but Franklin must have delighted in Bancroft’s curiosity, not unlike his own. Bancroft’s knowledge of electric eels clearly piqued the latter’s interest. It was Franklin who first drew John Walsh’s attention to Bancroft’s experiments with Guiana eels, which Walsh was to acknowledge in his own work on torpedo fish at La Rochelle. (Bancroft and Walsh subsequently corresponded on the subject of nigrescent vegetables or black dyes.) Franklin afforded Bancroft a decisive entrée into London’s community of whigs, liberal dissenters, merchants, colonial agents and pro-American sympathizers. In return, Bancroft busied himself in multiple publications. He produced a political tract in defence of American liberties, focused on American and scientific themes while an editor at the Monthly Review and released the Natural History. This performance was rewarded with a fellowship at the Royal Society in 1773.

The plantation denizen was now ‘a gentleman versed in natural history and chymistry,’ with some powerful philosophical backers: Franklin, John Walsh, William Watson, Daniel Solander and Nevil Maskelyne, among others.

Bancroft’s career may seem an inverted footnote to Franklin’s. But it is interesting to note how, just as Franklin helped to produce Bancroft, so Bancroft helped produce Franklin. He edited Franklin’s miscellaneous philosophical papers for publication as a book in 1787 and published a famous account of Franklin’s conduct in the so-called Cockpit scene of 1774, where Franklin was publicly excoriated by Solicitor General Wedderburn for publishing private correspondence to warn Massachusetts of its impending suppression. Tellingly, the would-be chemist of dyes and double agent paid special attention to Franklin’s dress—‘a full dress suit of spotted Manchester velvet’—and to his impressive inscrutability.

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45 Edward Bancroft to John Walsh, Mar. 6, 1774, read as ‘Note on nigrescent vegetables,’ Apr. 14, 1775: Letters and Papers, Royal Society Archives, 7: fol. 111.


47 Joseph Priestley was another notable friend of Bancroft’s. For Bancroft’s certificate of election, see EC/1773/12, Royal Society Archives; on William Dampier’s self-translation from pirate to genteel author in an earlier era, see Anna Neill, ‘Buccaneer ethnography: nature, culture, and nation in the journals of William Dampier,’ Eighteenth-Century Studies 33 (2000): 165–180.
When Bancroft returned to Guiana sometime between 1769 and 1771, he wasn’t only plunging treated wooden planks into rivers, combating worms and dreaming of connections to the Bankses of the world. The other principal motive for his return was his burgeoning friendship with another American in London: Paul Wentworth. The seed of Bancroft’s double agency had also been sown in the plantations of Guiana. Wentworth was descended from a large New-Hampshire family and owned two plantations on the Demerara River, prior to representing New-Hampshire at Westminster. Having already known Bancroft in South America, he doubtless acted as another key sponsor for his reception into the American community. Bancroft’s return to Guiana in 1769 was also for the purpose of monitoring Wentworth’s property. Evidently for a job well done, Wentworth, operating under the direction of William Eden at the Board of Trade, recruited Bancroft to spy on American negotiations in Paris, as the mainland colonies declared independence and revolutionary war erupted in 1776. Wentworth, not Franklin, was thus Bancroft’s true master, and he initiated him in an extraordinarily meticulous and long-lived career as a spy, lasting the entire wartime period and earning him between £500 and £1,000 per year. Invisible inks, multiple languages, aliases, concealed communications, even poisons—this was the arsenal of technologies, many rooted in Bancroft’s colonial background, that now served his cross-channel manoeuvres. As the hardworking secretary to the delegation, Bancroft was privy to Franklin’s negotiations with ministers like Vergennes in Passy, as well as to all correspondence of his mentor and now senior colleague Silas Deane, for whom he translated, his French being far superior. As one version has it, Bancroft made a journey to the Tuileries Gardens every Tuesday evening after half-past nine, where he lowered a bottle stuffed with letters by a twine cord, through an opening marked by a peg in a hollow tree to which the twine was fastened. Some time later the secretary to the British ambassador Viscount Stormont would recover the letters and deposit new instructions. Bancroft’s were ostensibly love letters written by a Mr. Richard or Richardson; in reality, their pages also contained handwritten copies of letters and documents penned in invisible red ink, awaiting chemical decoding in London. He was paid under the suitably doubled-up alias ‘Edward Edwards.’ Wentworth, who also spoke impeccable French, possessed at least twenty aliases (English,


Scottish and French; male and female), under which he collected mail at no less than five different London addresses, and travelled with his own personal cipher and several invisible ink recipes to evade detection by the Paris police lieutenant Jean-Charles-Pierre Lenoir. Accusations of spying and embezzlement swirled through American circles. Ironically, the relatively honest Deane fell victim. Accused of improper accounting, he was recalled by Congress, replaced by John Adams and later died suddenly in 1789—poisoned, according to one theory, by Bancroft, who may have feared exposure. In reality, the republican mission was rife with speculation and profiteering, but the double agents went undiscovered. Wentworth achieved his goal of becoming an MP after the war, before returning to Demerara, while Bancroft’s British service remained unknown until the publication of state papers in the late-nineteenth century.\footnote{Shepperson, *John Paradise and Lucy Ludwell* (cit. n. 44), pp. 352–354; Schiff, *A Great improvisation: Franklin, France, and the birth of America* (New York: Henry Holt, 2005), pp. 61, 75–77, 151, 408; Edward Bancroft, *A Narrative of the objects and proceedings of Silas Deane, as commissioner of the united colonies to France*, ed. Paul L. Ford (Brooklyn, N.Y.: Historical Printing Club, 1891); see also the letters by Bancroft in British Library Mss Add. 34414, for example to ‘William Duncan’ (a Wentworth alias), fol. 278.} In Adams’ typically cutting view, Bancroft was a ‘meddler in the stocks … [who] frequently went into the alley, and into the deepest and darkest retirements and recesses of the brokers and jobbers, Jews as well as Christians, and found amusement as well, perhaps, as profit, by listening to all the news and anecdotes, true or false, that were there whispered.’ But, he conceded with unwitting understatement, he had ‘a clear head and a good pen.’\footnote{Adams, *Works* (cit. n. 17), 3: 142.}

Bancroft had several good pens in fact. He not only operated as a go-between. He dramatized and theorized the lives of go-betweens in the three-volume epistolary novel he published in 1770 as *The History of Charles Wentworth*—the title a coded homage to his duplicitous patron. Although published anonymously, anyone who’d seen the *Natural History* the previous year would have known Bancroft to be the author, given the substantial (sometimes verbatim) borrowings from the earlier work. Its plot recycled and remodelled his Creole’s travels, reorienting them as the moral fable of a metropolitan fortune-seeker who sails from England to the Americas. While his brother Edward studies natural philosophy as preparation for taking holy orders in morally salubrious Cambridge, young Charles plunges into London’s more compelling theatres of practical and carnal knowledge. A surgeon’s apprentice, he falls in love with the fair and virtuous Sophia, although his desire to marry her is blocked by his propertyless status. Giving in to his frustrations, he indulges instead his more libertine tendencies, delighting in the seduction of a young woman named Miss Jackson. Remorse over his vicious conduct, and the subsequent alienation of Sophia, drive him across the Atlantic to re-

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50 Shepperson, John Paradise and Lucy Ludwell (cit. n. 44), pp. 352–354; Schiff, A Great improvisation: Franklin, France, and the birth of America (New York: Henry Holt, 2005), pp. 61, 75–77, 151, 408; Edward Bancroft, A Narrative of the objects and proceedings of Silas Deane, as commissioner of the united colonies to France, ed. Paul L. Ford (Brooklyn, N.Y.: Historical Printing Club, 1891); see also the letters by Bancroft in British Library Mss Add. 34414, for example to ‘William Duncan’ (a Wentworth alias), fol. 278.

51 Adams, Works (cit. n. 17), 3: 142.
coup his fortunes. He makes some money as a physician working in Barbados, and then as a privateer preying on French shipping (the novel is set just a few years earlier, during the Seven Years War), before shrewdly investing his spoils in a sugar plantation in Dutch Guiana, which he populates with African slaves brought from Barbados. After the Berbice rebellion is put down in 1763, he embarks on a journey upriver to the interior, an adventure which climaxes in his meeting with Gordon, an exiled Scot who explains at length his rejection of the corruptions of capitalist society and his decision to live permanently among the Arawak. Wentworth, by contrast, finding Guiana too unstable, decides to sell off his plantation and return to England, making restitution to Miss Jackson back in London, and ultimately marrying Sophia, who has forgiven him his youthful indiscretions. In a final twist, however, Wentworth reverses course one last time, setting his sights West to Philadelphia, a city of religious and civil liberty and 'the embryo of a mighty empire, which in some future century … may give laws to European nations, till like them enervated by luxury and vice, it shall totter to its fall.'

Here, he plans to establish himself in agriculture for the common good and the aid of the poor.

While Wentworth’s life-story might be seen as fictional, Bancroft urged readers in one of several revealing footnotes that ‘the account given of Guiana … may be relied on as true.’ This raises an interesting problem of interpretation: what status should ostensibly novelistic reportage be granted by comparison with the presumptively more reliable account contained in a work like the Natural History? Accounts of Bancroft have scrupulously avoided discussion of the novel as noise that distracts from the signal, whether the focus has been on politics or science. It is a mistake to ignore this significant act of self-translation, however, not least because there is no self-evident reason to subscribe to a simplistic dichotomy of natural-historical truth-telling versus novelistic invention. Two points need underlining here. First, the description of Guiana that takes up most of the middle volume of Charles Wentworth is just that: a description that almost completely lacks narrative and, most unusually for its genre, describes contemporary historical events, places and people, such as Gedney Clarke’s involvement in suppressing the Berbice slave rebellion. As one critic has pointed out, the middle volume resembles nothing so much as the overflow of journal notes not used for the Natural History. Second, as is

54 Born into a family of Yorkshire and Suffolk origins, Clarke had extensive mercantile links to New England and Virginia, became one of the leading Barbadian planters, and enjoys the historical privilege of having hosted George Washington on his only trip outside North America, to Barbados in 1751. On Clarke, see Smith, Slavery, family, and gentry capitalism (cit. n. 14), pp. 20, 99–102.
well known, telling the difference between travel writers and ‘travel liars’ was often a highly vexatious prospect, since narrative invention was a resource for all those engaged in bringing exotic worlds coherently to life for domestic audiences through prose performance. As J. Paul Hunter has stressed, producers of novels by no means invented de novo, however, but reassembled narrative and topical elements already available in other genres. The crafting of stories that meditated successfully on the formation of the bourgeois self depended on understanding and gratifying pre-existing cultural expectations which, in the case of Wentworth, involved following well-trodden paths of self-reflection through exotic travel, although with an unusually heightened realism stylized through newly fashionable Rousseauvian dichotomies of corrupt civility versus noble savagery. In this respect, Bancroft’s work was an astonishing crucible of elements that fused astute awareness of the literary-philosophical marketplace; moral-economic anxieties about luxurious consumption and corrupt credit systems; incipient abolitionist exhibition of the colonial atrocities of slavery and direct experience of extreme Guianese environments.

If early novels acted as laboratories in which bourgeois selfhood might be imagined and worked out, Wentworth used the figure of Gordon to embody and espouse a radical, if morally ambiguous, rejection of the entire capitalist system that manufactured such selfhood. This rejection was both dramatized by the reversals of fortune typical of a capitalist order founded on violence, colonialism and slavery, and theorized by Gordon as a philosophical exile. The novel’s middle volume offered a detailed anatomy of precisely what kind of worlds and deeds were necessary for Wentworth to make his metropolitan fortunes—precisely the kind of geographically connective narrative about colonialism that Edward Said emphasized was largely absent in the nineteenth century. Slavery provided one of the key vectors for Bancroft to discuss extreme differences of property and social status, and how violent resistance challenged such divisions, destabilizing precarious allegiances and dominions. His exhibition of horrifying spectacles, such as breaking rebel slaves on the wheel and the display of severed African heads by the Dutch, was emphatically linked to philosophical consideration of the justice of slaves’ right of resistance. One rebel suffered in heroic martyrdom ‘the torment of being roasted, by slow degrees, until her skin rose in blisters, and her eyes started from their orbits.’ Gruesome scenes absent from the Natural History now found their way into Wentworth to convey a nightmare world of collaps-

ing orders of property, race and sex. After executing Berbice’s Dutch governor and most of his family, a Congo rebel named Cuffee took prisoner ‘a young lady of character and fortune, the daughter of Mr. George, a Dutch planter in Berbice ... [and] compelled her to become the slave of his libidinous pleasures.’ Racial solidarity among whites was also menacingly fragile. There were ‘several Dutch soldiers, whom ambition or avarice has tempted to desert from the river of Currantine,’ it was reported, ‘where they had been posted by the governor of Surinam, and go over to the negroes, by whom they are employed in training them to military discipline.’

Wentworth’s Hobbesian narrative did not unequivocally espouse the politics of anti-slavery, but it captured the growing awareness, well before the abolitionist campaign became a popular movement, of violent contradiction between natural rights talk and the cruelties of slavery, employing what became abolitionism’s signature fusion of almost pornographic representations with moral-philosophical argument. African resistance, ‘which, in an European, we should have commended as a glorious instance of maganimity and heroism ... is deemed criminal in an African slave, [for] which these people have suffered the most cruel punishments that revengeful ingenuity could invent.’ Such punishments, Bancroft had Wentworth proffer, were an ‘infringement of the divine prerogative.’

The European social order, supported by colonial atrocities, was a charade of sham Christian morals that hid the amoral contingencies of capitalism, and one Gordon had chosen to desert. His confession to Wentworth was a story within a story within a story that cast another refracted image of Bancroft’s own Atlantic odysseys. Born in Puritan Scotland, a culture whose deluded self-repressions were exceeded only by the enthusiastic ‘phrenzy’ of New-England, he, like Wentworth, had disgraced himself through sexual impropriety, consorting with prostitutes in Edinburgh to gratify his youthful lusts. Flight to London, however, merely lowered him further into the concentric rings of Christian hypocrisy and capitalist shame, landing him after a series of misadventures in debtor’s prison, where he reflected on his descent. On ‘this busy insidious stage of nature inverted,’ he found himself ‘surrounded by thousands [but] without one friend,’ in a world where every man was ‘repeating the language of virtue, but contriving the ruin of his neighbour.’ On regaining his freedom, Gordon, foreshadowing Wentworth, sailed for the West In-

dies. He eventually chose to settle among the Arawak in Guiana, embracing a natural religion of ‘calm, solid, and rational happiness’ free from superstitious orthodoxy. Versed in the scepticism of Hume and Rousseau, he became a convinced materialist. Here author Bancroft again emphasized the primacy of sensory experience. The senses were the true ‘agents’ of human existence, Gordon held, men their mere ‘patients.’ What lay beyond the senses man could not (and perhaps ought not) attempt to judge, given the tragic results produced by the delusions of priestcraft. “A man’s body and his mind … are exactly like a jerkin and a jerkin’s lining,” he quoted Sterne’s *Tristram Shandy*; ‘rumple the one—you rumple the other.’ An immortal soul was a comforting fancy, but reality to be found in the ‘constant progressive change’ of matter from one form to another. Buried in the Chinese box of Gordon’s soliloquy, Bancroft’s go-between philosophy expressed the outsider’s sense of rootlessness, contingency and irrelevance to the order of nature. Human identity itself was a ‘chain of trivial and apparently accidental circumstances,’ made of sense, movement, passion and flux. In the end, ‘impotent man’ was but ‘the insect of a day.’

Gordon’s appearance as a variety of ‘unredeemed captive,’ who willingly abandoned civil society for a life of primitive happiness, was the central moral statement of the novel. It was also one Bancroft was concerned to ensure his readers found credible, so he attached a lengthy footnote that described historical examples of the fallacy of European cultural redemption. In so doing, he drew together two pressing issues from recent events: problems of allegiance and identity in intercultural conflict during the Seven Years War and the violent clashes between Amerindians and settlers on British America’s western frontier. *Wentworth* was perhaps the first English-language novel to invent a voluntary permanent cultural exile. The factor found living in the African interior in Daniel Defoe’s *Captain Singleton* (1720) was, for instance, redeemed in the end. Similarly, oft-recounted historical precedents, such as the sixteenth-century Spanish explorer Alvar Núñez Cabeza de Vaca’s transportation from Florida to Mexico and eight-year Amerindian captivity, also ended in emphatic Christian redemption, or so the narrative went. Concern, indeed fascination, with the risk of captivity at the hands of non-Europeans intensified in Britain during the conflict with French and Indian enemies during the Seven Years War. Unredeemed captivity was an especially fraught prospect

62 Compare Gordon’s view to the ways in which the senses were variously valorised and repressed in the cultural negotiations discussed by Spary in this volume.
when the defeat of the French ironically made British America’s frontiers more unstable, as American settlers sought to move west seeking new lands. In introducing Gordon, Bancroft directed his readers specifically to the aftermath of the British attacks led by colonel Henry Bouquet on the Ohio Country Indians in 1764, part of the conflict traditionally known as ‘Pontiac’s War’. He stressed not the Christian redemption of savagery but the natural bonds of sentimental affection across cultures that powerfully resisted redemption. Returning ‘home’ was a traumatic ‘new captivity’ for those who had lived among the Indians. They ‘not only parted from the savages with reluctance, but with tears.’ Captured British-Americans sometimes had to be bound to force them ‘home’, while others managed to escape and rejoin their captors who, no less sentimentally or even romantically attached to them, delivered them up again with ‘torrents of tears,’ if at all.66

Such natural bonds exposed the fraud of conventional allegiance. Only ‘through force or folly, have [we] been formed into national or political societies, for which nature provided no cement or bond of union,’ Gordon reflected.67 Bonds of natural affection were precisely the kind he celebrated in his own union with his Arawak ‘wife’, in contrast to the contractual charade of marriage. Ever colour-conscious, Bancroft had his narrator Wentworth naturalize such relations and their progeny through the language of chromatic mixture. Gordon’s mate was ‘a perfect brown beauty,’ while ‘the child in her arms was of an intermediate colour, between the skin of an European and that of an Indian of the Arrowauk tribe.’68 Such philosophical sympathies with Amerindians obscured Bancroft’s own stake in post-war North American settlement, however. In reality, Bancroft was an investor in the Vandalia Company, a British and American group headed by Thomas Walpole, MP, which (vainly) lobbied Parliament to relax the 1763 Proclamation Line and grant its claim to 2.4 million acres of land in the upper Ohio Valley—precisely the kind of venture threatening the Amerindian presence Wentworth romanticized. Where the exile Gordon lived in seeming harmony with the Arawak, the rather different contemporary reality of go-betweens’ frontier politics was suggested by the career of Sir William Johnson of New York. The remarkable Johnson was an Irish trader who became Superintendent of Indian Affairs, as well as father of several children by Mohawk women, a cultural cross-dresser, and the greatest collector of Amerindian curiosities in British America. It was


Johnson who led in arranging the 1768 Fort Stanwix negotiations with the Iroquois that dramatically expanded settlement west, producing more frontier violence in the process and no security of land-tenure for increasingly vulnerable native peoples.\textsuperscript{69}

\textit{Wentworth} did, however, dramatize Gordon’s voluntary cultural repatriation as a moral dilemma of colonial intervention, one staged to turn on a political contest between shamanic technique and experimental prowess. ‘I asked,’ Wentworth recounted, ‘whether he had employed his influence over [the Arawak] to improve their morals?’ Only to prevent starvation through the regular planting of cassava, Gordon replied, which they sometimes neglected in their indolence. But ‘as for what you would consider an improvement in their way of life, by increasing its conveniences, I have carefully avoided it.’\textsuperscript{70}

For the anti-enthusiast Gordon, the natural morality of the Arawak was compromised by their craven belief in malevolent spirits named the ‘Yowahoos’ and their credulous trust in the abilities of the ‘peii’ to placate them. The Arawak were ‘oppressed by religious tyranny,’ no less than he himself had been ‘by the devils of Christians.’\textsuperscript{71} Moved by their plight, he resolved to enlighten them. However, the Peii, ‘alarmed at my attempt, … opposed it with all their art.’ As the epigraph to this essay recounts, Gordon employed both electrical and chemical apparatus to exhibit his own command of invisible powers, and claimed ‘even their Peiiis, who unite in themselves the characters of priest and physician, have universally yielded me the superiority.’ Yet he was obliged to confess the persistent preference of the Arawak for their rituals over his performances and medicines. He invited Wentworth to the nocturnal exorcism of an ailing Arawak man by a Peii who offered incantations ‘delivered in an unintelligible jargon’ to the Yowahoos. ‘We heard, about the hour of twelve,’ Wentworth related, ‘an apparently distinct voice, seeming to proceed from an adjacent wood, and forming articulate sounds; which continued for half a minute.’ The Peii ceased his incantation and interpreted the sounds as diagnostic demonic will. Whose voice was it?, Wentworth asked Gordon insistently. Gordon ‘could not explain.’ Casting the shaman as rival showman, he lamented that ‘it must be the effect of some artifice in the peii, which he had never been able to detect.’ Their shows and chants not only kept the Indians and slaves in thrall ‘but had even staggered the faith of many of the white inhabitants,’ he noted.\textsuperscript{72} Gordon was thus a universal exile permanently be-

\textsuperscript{69} Richard W. Van Alstyne, ‘Thomas Walpole’s letters to the duke of Grafton on American affairs, 1776–1778,’ Huntington library quarterly 30 (1966): 17–33; O’Toole, White savage (cit. n. 5); White, Middle ground (cit. n. 15). See also the treatise on western settlement attributed to one of Bancroft’s Vandalia associates: Samuel Wharton, View of the title to Indiana, a tract of country on the river Ohio (1775?).

\textsuperscript{70} Bancroft, Charles Wentworth (cit. n. 1), 2: 262–264.

\textsuperscript{71} Bancroft, Charles Wentworth (cit. n. 1), 2: 265, 267.

\textsuperscript{72} Bancroft, Charles Wentworth (cit. n. 1), 2: 270–273; see also the very similar discussion in Bancroft, Natural history of Guiana (cit. n. 11), pp. 309–315.
tween worlds, the experimental mastery to which he clung unable to make his
adopted people of one mind with his own enlightened beliefs.\textsuperscript{73}

\textit{Wentworth}'s freethinking sentiments effected their doubtless desired
provocation. This novel, crowed the pious Adams, ‘was recommended to many
readers, and procured a considerably better sale, by the plentiful abuse and
vilification of Christianity, which [Bancroft] had taken care to insert into it.’ It
‘strikes at the root of all religion and morality,’ one reviewer wrote, ‘by endeav-
ouring to establish fatality’ against free agency, and reducing human behav-
iour to mere ‘clock-work,’ and human beings to ‘ridiculous puppets.’ Writing
of a dinner at Auteil in 1784, Abigail Adams described Bancroft as ‘a native of
America,’ said, she noted with quiet excitement, ‘to be the author of Charles
Wentworth.’\textsuperscript{74} Despite such notoriety, \textit{Wentworth} subsequently fell out of view
and has remained virtually invisible ever since.\textsuperscript{75} Remarkably, it was one of the
first novels ever published by an American, but it was neither about British
America nor Britain. There are surely several reasons for its invisibility, among
them its generic incoherence as a ‘novel’ and its author’s identity as neither
straightforwardly ‘British’ nor ‘American’. Bancroft was in fact a truly Atlantic
writer, whose narrative was precisely one of extreme geographical displace-
ment, but therefore one that has proven much harder to categorize and canon-
ize. Moreover, as Ralph Bauer has emphasized, colonial American societies

\textsuperscript{73} On go-betweens as permanently between worlds, see the essay in this volume by
David Turnbull.

\textsuperscript{74} Adams, \textit{Works} (cit. n. 17), 3: 141–142; \textit{Literary and critical remarks, on sundry emi-
nent divines and philosophers, of the last and present age} (London, 1794), pp. 346, 351,

\textsuperscript{75} In one interesting episode, the American counterfeiter Stephen Burroughs had
\textit{Wentworth} selected for inclusion in his proposal for the establishment of a new library
at Bridgehampton, New York, in 1793. Eerily like the author of \textit{Wentworth}, Burroughs
had withdrawn from Dartmouth College as a youth, run off to sea, become a privateer
and then a ship’s physician, before passing himself off as a Congregational Minister on
returning to Massachusetts, and getting arrested and imprisoned for passing counter-
feit money. He published a widely read autobiography in 1798 in which he suggested
that reading bad books had corrupted him. This was precisely the issue in 1793 when
Burroughs met religious opposition over his selections for the Bridgehampton Library.
A public debate over the merits of \textit{Wentworth} took place in which the local townspeo-
ple voted to buy the book despite its moral ambiguity. ‘The truth was this,’ Burroughs
later interpreted the decision, ‘there had been so much said respecting the book, that
each individual was anxious to gratify his curiosity by seeing this phenomenon; and
each one who had read it, was more afraid for others than for himself, therefore it was
determined that the book should remain a member of the library, in order for each
one to be gratified by the perusal.’ See Susanna Ashton, ‘Stephen Burroughs and the
Bridgehampton, New York, library,’ \textit{Libraries and culture} 38 (2003): 106; on print and
republican morality, see Michael Warner, \textit{The Letters of the republic: publication and
the public sphere in eighteenth-century America} (Cambridge, Mass.: Harvard Univer-
consumed European novels rather than produce their own. The authority to narrate and control narrative outcomes was ostensibly a metropolitan prerogative. Under the Old Regime, narrative power was presumptively imperial, not colonial. It was no accident, then, that Bancroft the Creole authorized himself by presenting Wentworth as a metropolitan hero for his British readership. Bancroft well understood empire’s narratological dynamics and the need to translate himself into literary personae he believed local audiences would find intelligible. In so doing, however, he ironically made himself invisible to posterity just as Franklin’s improvisation of an American identity was to make him the most visible of all early Americans, despite his own imperial service and metropolitan ambitions.

If Bancroft was to some extent a cultural passeur in his ventriloquism of Wentworth, the visible identity he paraded in the revolutionary period was very much that of an American expatriate, albeit in multiple guises: as trusted secretary in diplomatic circles and, simultaneously, as knowledgeable informant to his British employers. He was a virtuoso of multiplicity. ‘By way of amusement,’ he wrote of Wentworth’s return crossing to England, doubtless amusing himself in the process, his hero was sitting ‘at the cabin-window, dipping up a bucket of sea-water, in order to make some philosophical observations, [when] he unfortunately over-reached himself, and fell overboard.’ So Bancroft’s alter ego appeared to meet his doom while researching an article for the Philosophical Transactions, in a scene that lampooned Franklin’s penchant for dramatizing his honest curiosity through physical misadventure, as well as his habit of shipboard philosophizing. In truth, this image of the virtuous philosophical traveller was vintage misdirection. Some years later, at the close of the revolutionary war in 1783, Bancroft himself sailed west to Philadelphia on the aptly named Commerce. Still officially part of the American delegation to France, he also went as the agent of Silas Deane; as promoter of the Vandalia Company; as agent of the Prince of Luxembourg on a mission to collect money owed for outfitting a ship for the state of South Carolina; as a collaborator in the financial projects of Robert Morris of New York; and, most ironically, as a friend of Lafayette, who introduced him to George Washington, military hero of the revolution. But this was not all. Ten days before sailing, he had written to Lord North, recently prime minister, complaining that he had not been paid for services rendered and, feeling himself ‘in a precarious situation,’ begged for a personal interview. ‘I have been and still am perswaded [sic],’ he wrote, ‘that through my present connections in America & those which must nec-

James Delbourgo


essarily result from the many strong recommendatory Letters which I carry thither to General Washington, the President of Congress, the Governors of several of the States, Mr. Robert Morris, Mr. Livingstone &c &c &c, I shall be able to obtain & communicate much useful information and ...promote the views & interests of the British Government in that Country.'

**CHEMICAL EMPIRE**

On that same American voyage in 1783, Bancroft reunited with his brother Daniel in Philadelphia to discuss an ongoing project on which they had worked since the late 1760s: the attempt to transport, analyze and market American dyes for sale in Britain. These chemical brothers essayed, once more, multiple movements and translations that featured the yellow dyestuff derived from what Bancroft christened the 'Quercitron Bark'. This substance simultaneously assumed the status of a royally patented invention in the context of early industrialization and the textile trades and a resource in debates concerning the chemical behaviour of dyes, the proper character of chemical inquiry and the physical nature of light and colour. Bancroft’s intervention in optical theory and his chemical philosophy have won brief attention from historians of science as indicators of the fortunes of the ideas of ‘revolutionary’ figures: Isaac Newton, whose doctrine of light and colours he challenged, and Claude-Louis Berthollet, whose chemistry of dyes he championed in the British vanguard of the chemical reformism associated with the name of Lavoisier.

By contrast, this section examines the social and technological aspects of Bancroft’s interventions on their own terms, asking what other movements accompanied and enabled them. Two factors matter here: Bancroft’s ongoing engagement with indigenous Guianese materials and techniques, and his mobilization of long-distance transportation and short-range legal protection to profit from his chemical expertise. Finally, political and geographical movement involved epistemic movement as well; regime change involved the reconstitution of authority. By elaborating a ‘philosophy’ of permanent colours in his final and most extensive published writings, the Creole empiricist and freethinking colonial critic seemed to turn metropolitan natural philosopher and imperial projector. What, however, did the linking of these individual movements signify for the broader relation between political revolutions, their

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79 Edward Bancroft to Lord North, July 22, 1783, British Library Mss Add. 61863, fol. 118.
80 On family members as trusted long-distance commercial agents, see David Hancock, *Citizens of the world: London merchants and the integration of the British Atlantic community, 1735–1785* (Cambridge: Cambridge University Press, 1995).
reorganization of colonial resource networks, and techno-scientific projects at the end of the eighteenth century?

While living in Guiana, Bancroft looked closely—very closely—at hammocks (Figure 4). Colonizers emulated natives in using hammocks for sleeping quarters, he noted, ‘being more secure from snakes and poisonous insects than beds,’ although their feet remained exposed to bats that ‘with great dexterity imperceptibly open the veins, and suck the blood.’ Named from the Arawak word *hamaca*, hammocks were object-sites of social and spiritual practice in indigenous American cultures. Normally situated inside wooden dwellings, these were thing-places where children were born, in which the dead were interred and where shamanic healing was executed, as well as key commodities in Dutch-Amerindian trade relations. In the *Natural History*, Bancroft glossed their multiple uses briefly and critically as sites of native sloth: ‘the greatest part of their leisure hours are idly passed in their hammocks, in which they not only sleep, but eat, converse, play, blow a kind of rough clumsy flutes, eradicate their beards, or view themselves in glasses, and admire their features, for they are not untinctured with vanity.’ Such chauvinism was typically matched once again by his curiosity, however, focused intently as it was on hammocks as examples of indigenous industry, skill and natural mastery. He described the months-long work of Carib weavers and dyers in constructing and colouring cotton hammocks in particular. ‘When the weaving is compleated,’ he carefully noted, ‘the hammock is stained with

FIGURE 4  Arawak hammock from Guiana, made from cotton and pineapple fiber, late-nineteenth century: Bancroft’s chemistry projects originated in his exposure to indigenous Guianese coloring arts, from body-painting to the use of dye-stained cotton hammocks. © the Trustees of the British Museum.

juice of the bark of trees [Wallaba and Red Mangrove], disposed so as to form various figures, which are red, and ever after indelible. ‘These Carib productions made the strongest and finest cotton hammocks anywhere in Guiana.’ Several years later in London, Bancroft recalled these hammocks when he appealed to the Royal Society for the Arts to endorse his introduction of a new permanent black dye for cotton and linen. ‘In an essay on the natural history of Guiana,’ he wrote to President Samuel Moore in 1771, ‘I mentioned a substance with which the Indians in that country stain their cotton hammocks of a red colour. This circumstance soon produced several applications for engaging me to undertake the discovery of an article so much wanted by the printers of linen & cotton….’ Inter-cultural exchange in Guiana, transatlantic industrial profiteering and chemical philosophizing in London were interrelated sites and projects—not singly but repeatedly so—as Bancroft moved back and forth across the Atlantic into the first decade of the nineteenth century.

Long before the ‘revolution’ associated with the name of Lavoisier, chemistry was both a useful and an imperial art. Chemical techniques were fundamental to the work of eighteenth-century pharmacists, apothecaries and dyers, all of whom depended on knowledge of the qualities of specific materials and access to commercial networks for their acquisition. Giovanni Francesco Vigani, for example, the first professor of chemistry to teach in the University of Cambridge in 1702, possessed a medical cabinet in Queens’ College stuffed with specimens of balsams and barks from New Spain to Siam, which he used for concocting recipes and lecturing in the university. To a far greater extent than scholars have acknowledged, chemical practitioners’ wares were implicated in trades, commercial networks, colonization and empire-building. Hans Sloane, whose global collection of specimens and curiosities formed the basis of the British Museum in the 1750s, trained as an apothecary and iatrochemist in the Stahlian tradition under Nicolaus Staphorst, chemical operator at the Apothecaries’ Garden in Chelsea in late 1670s, and attended the chemical lectures of Nicolas Leméry in Paris, before putting his recipe-making and preservation skills to profitable use on a voyage to the nascent slave society of Jamaica during 1687–1689. While serving as physician to the sugar colony’s new governor and his dissolute cronies, Sloane collected eight hundred plant specimens, including Peruvian Bark and chocolate (whose bitterness he sweetened with milk) for preparation and packaging as lucrative remedies for sale in the metropolis. Having returned from Jamaica, Sloane then patronized Staphorst, and received specimens gathered in Guinea by his son, who had previously collected for the apothecary James Petiver in India. In 1722, in return for charging a modest rent of £5 as its new landlord, Sloane secured a lasting arrangement by which the Apothecaries’ Garden sent the

85 Edward Bancroft to Samuel Moore, May 20, 1771, Archives of the Royal Society for the Arts.
Royal Society some 50 specimens per year, gathered from around the world, for experimental purposes.\footnote{86}

Chemical technique was thus well established as a useful, if to some unphilosophical trade, by the mid-eighteenth century. The intersection between the commercial rapacity of mercantile systems, underwritten by the slave trade, and chemical utility, was aptly championed by Malachy Postlethwayt. Best known as a theorist of mercantilist political economy, Postlethwayt was also an apostle of chemistry, whose ‘important utility to a great variety of arts’ and relevance to ‘general traffic and navigation’ his entry in the *Universal Dictionary of Trade and Commerce* (1751) aimed to ‘glaringly display.’ Wasting no time on alchemy’s ‘metaphysical speculations,’ Postlethwayt detailed some basic experiments, emphasizing that all that was needed to become a ‘useful and judicious chemist … is, to keep close to information of the senses.’ He was forced to admit, however, that chemical projects could also be financial traps. His own determination to master theory and practice stemmed from having fallen foul of ‘chemical jugglers’ in a venture to smelt and refine lead in Northern England.\footnote{87} The dyeing trade, meanwhile, had long linked the global circulation of prized commercial dyestuffs, such as indigo from South Asia and more recently cochineal from the Americas, with the jealous protection of practical colouring expertise by European guilds. Intensification of chemical experiments with dyeing began in the 1730s, when English manufacturers started using metal plates to dye cloth with indigo, a technique which required an understanding of the chemical interaction between mordants, metals, dyes and fabrics, and when Charles Dufay engaged in systematic tests in France at the storied Gobelin tapestry-works to distinguish and explain chemically the variable permanence and strength of dyes on different fabrics. In an era of


intensifying competition, speculative economic ventures and industrial organization that aimed at expropriating control of dyeing processes from expert guilds to new factory managers, factory-owners began to employ their own chemical operators, while both calico-printers and chemists wrote of the need for colourists to master chemistry’s philosophy.  

This was the context in which Bancroft, one of whose Aberdeen professors, George Fordyce, was himself a chemical lecturer, sought to introduce the Quercitron Bark, which he described at length in his culminating work, the *Experimental Researches concerning the Philosophy of Permanent Colours* (1794). This drew on two decades of ‘notes of several thousands of experiments made therewith, in almost all possible ways, and with almost all possible chymical agents,’ he announced. It was ‘not only the brightest, but the cheapest of all yellows,’ he declared, and was of great use as an alternative to both weld and fustic and, in combination with cochineal, to make scarlet. Its source was the North American black oak tree, which grew along the eastern seaboard from Lake Champlain to Georgia. The yellow colorant was to be found in the tree’s middle or cellular coat, Bancroft explained, whose brownish inner parts required ‘shaving’ to extract the dyeing agent, before milling it to produce both fine powder and filaments, infusing this mixture with water and ultimately evaporating it to produce the dye extract. This extraction (Bancroft did not explain who performed this labour) was a wise investment, producing perhaps ten times the yield of the weld plant. Numerous chemical interventions, including the use of different mordants, could modify the results as desired. Decoctions of Quercitron were yellowish-brown in colour, and could be darkened by using alkalis, lightened by acids; enlivened by muriates (chlorides), combined with metal sulfates to produce variant colours.


89 The other recommender for Bancroft’s MD degree was the noted philanthropist John Cockelettsom: Anderson and Anderson, ‘Edward Bancroft’ (cit. n. 43): 361–362; Boyd, ‘Silas Deane’ (cit. n. 3): 176.


and combined with alum as a mordant for dyeing wool, whose preparation through scouring and rinsing he carefully detailed. Its strength was its quality and versatility for use with silks, wool and in calico printing. This was a new dye, a cheap one, and a reliably colourful and permanent one.92

Maintaining commercial control of the Quercitron was much harder than maintaining chemical control appeared to be. Bancroft’s campaign to profit from the bark depended not merely on publishing the results of chemical trials but, crucially, on securing transatlantic shipping resources, as well as the linked presentation of sample specimens and oral testimony before a range of political and scientific bodies. In 1771, Bancroft began to employ his brother, now in Philadelphia, to oversee shipments of Quercitron, as well as Red Mangrove and American Hicory, from America to London.93 That same year, in the letter he sent Moore at the RSA, he included nine carefully numbered samples of fabric dyed black by an unnamed Guianese substance for whose pro-

93 Edward Bancroft, Facts and observations (cit. n. 78), p. 3.
motion he sought support in the form of a premium (Figure 5). The samples were themselves crucial go-betweens: they brought remote Guianese materials to the attention of London chemists, while conferring on their bearer the authority that came with delivering remote specimens across oceanic distance—or so he hoped.94 ‘The colours at numbers 3, 4, 5, 6, 8, 9, will be highly useful as they must enable the dyers of this kingdom to give an agreeable variety of cheap and lasting colours,’ Bancroft counselled Moore to advise the committee on chemistry. The upshot was a series of interviews during which the Society, with an established record of evaluating colonial resources, quizzed Bancroft, ultimately calling on a local dyer named John Arbuthnot to conduct independent tests on his dye. Arbuthnot supported Bancroft’s claims, but Bancroft suddenly and mysteriously withdrew his application in 1773.95 Two years later, his fellowship at the Royal Society perhaps affording him the platform from which to aim higher, he successfully secured a royal patent for the Quercitron from Parliament in 1775, making him its sole legal importer in Britain. One observer put his subsequent income at a healthy £800 per annum.96

The paths of Bancroft’s long-distance circulation networks were vexed, however, by a saga of ‘interruptions’. In 1783, life imitated art. Mimicking the conclusion of Charles Wentworth, Daniel Bancroft suddenly disappeared. Fearing his brother and American ally dead, Edward sailed for Philadelphia, found his brother again, and the two resumed shipments of the Quercitron, although these remained vulnerable to the disruptions of the Napoleonic Wars, when neutral American grain was shipped so heavily to Europe that finding cargo space for extra commodities, where available, quadrupled in cost.97 War, which had provided such opportunities for the double agent, now undermined the commercial profiteer. Bancroft, now MD and FRS, successfully renewed his patent in 1785, but could not avoid embroilment in an ongoing struggle for prolongation. He submitted his now well-rehearsed interview skills once more to repeated interrogation by parliamentary committee. Seeking permission to

94 On objects as go-betweens, see the essay in this volume by Juan Pimentel.
97 Bancroft, Facts and observations (cit. n. 78), pp. 4, 20.
import Quercitron and Red Mangrove at a duty of one penny per hundredweight, irrespective of the price of English oak bark, he was invited to testify in March 1790 by the committee on trade and plantations, in the company of craftsmen, some of whose testimony openly contested his claims:

Q. What is the line of your business?
A. Mr. Warne: I am a tanner.
Q. Have you ever seen the Quercitron or black oak bark?
A. I have seen a species of foreign bark, but I know not whether it is called black oak bark. A specimen of the Quercitron or black oak bark being shown to Mr. Warne, the following questions were put to him—viz.
Q. Can this sort of bark be used for tanning, and will it answer as well as the common English oak bark?
A. Certainly it may be used for tanning, but from an experiment I have made of it, I find the quality of the English oak bark the strongest.
Q. Does not the Quercitron or black oak bark change the colour of the leather?
A. It gives the leather a yellower cast, not the natural colour of leather, and is therefore not so well approved of by the currier.

On this occasion, Bancroft overcame the opposition and secured the lower duty. But exactly two years later, the same committee heard a letter read by a Mr. Rose from ‘the manufacturers of Manchester, whose names are thereunto subscribed, praying that Dr. Bancroft may not have his patent for dying &c extended or prolonged.’ Bancroft re-appeared to testify that the purchase, shipping, grinding and customs cost him £18 per ton, whereas for the good of the nation, he sold it for only modest profit at £26–30 per ton. He retained the low import duty but this time, after the Commons approved his extension in 1799, the Lords refused it. Bancroft’s final published appeal of 1798 recounted a history of ‘impediments and interruptions,’ insisting he’d made nothing but virtuous losses. The master network-manager now blamed networks for his predicament, specifically the nefarious plantings of the prominent mill owners Yates, Peel and Company. According to Bancroft, Yates and Peel had received a specimen of the bark from John Arbuthnot, the same dyer to whom he had earlier sold a large quantity of samples. Enticed by Arbuthnot’s samples, Yates and Peel then conspired with Warder, Parker and Company of Philadelphia to ship Quercitron from America, violating Bancroft’s patent and decimating

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98 Testimony of Mar. 18, 1790 and Mar. 29, 1790, British Library Mss Add. 38392, fols. 80 and 86.
99 Testimony of Mar. 27, 1792, British Library Mss Add. 38393, fol. 213.
Finally, a cabal of eighteen ‘of the most opulent and respectable houses’ in the dye and calico trades, gathered from Liverpool to Scotland, had exaggerated Bancroft’s profits and mobilized hidden ‘connexions’ to persuade the Lords to reject the extension the Commons had already granted.\footnote{101}

As Bancroft’s fortunes tottered, the natural historian turned dye importer nevertheless busied himself in the creation of yet another persona: that of chemical philosopher. After a final voyage to Guiana around 1805, Bancroft produced a significantly expanded version of his \textit{Philosophy of Permanent Colours} in 1813. Both editions, but especially the revision, included accounts of field experiments with indigenous dyestuffs, translating earlier observations from the \textit{Natural History}, as well as his mastery of invisible inks, into the theoretical terms of French chemical reformers. Ethnographic attention to indigenous body-staining now furnished vital matter for philosophical chemists. For example, Bancroft described at length his visit to John Brummell’s Reinsteen Plantation in Demerara in 1805, where he closely examined the unripe fruit of the \textit{Gardenia Genipa}. This was the colorant he had discussed years before in the \textit{Natural History} as the Launa or Mauna Tree of the Arawak, which produced a blue that the Guianese used to ‘render themselves terrible to their enemies.’ This was a temporary effect, however. While indelible for 9 or 10 days, the blue then seemed to vanish, although this was really due to the erosion of the skin, Bancroft maintained. It was the skin that was impermanent, not the ink.\footnote{102} In attending to such body arts, Bancroft demonstrated virtuosic ability to think and argue across media of skin, cloth and paper. Even granting that such dyes made only fugitive colours on the body, it did not automatically follow that ‘because it did not remain on the skin, it would not remain upon paper.’\footnote{103}

Ill health, however, strained the aging go-between’s final experimental voyage. En route back to England, the \textit{Genipa} specimen Bancroft was carrying suddenly began to ripen at Barbados, turning its inner fruit suddenly blue, threatening his planned trials. Acting quickly, he improvised a set of experiments in Barbados, albeit with parodic results: ‘by the part which I took in slicing this fruit, my fingers were deeply stained; and as this stain might well seem \textit{indecorous} to the gentlemen and ladies, with whose hospitalities I was daily honoured, I spared no pains to remove it, by repeated washings with soap, alkalis, &c. and by frequent applications of lemon, and lime juice,

\footnote{100} Sir Robert Peel, Baronet, father of the future Conservative politician of the same name, was a Lancashire mill owner and leading producer of cotton textiles. See Stanley D. Chapman, ‘The Peels in the early English cotton industry,’ \textit{Business history} 11 (July 1969): 61–89.
\footnote{101} Bancroft, \textit{Facts and observations} (cit. n. 78), pp. 4–6, 8, 10–11, 13, 17; see also Bancroft to the earl of Liverpool, Jan. 12, 1799, British Library Mss Add. 38233, fol. 2.
\footnote{102} Bancroft, \textit{Permanent colours} [1813] (cit. n. 91), 1: 254.
\footnote{103} Bancroft, \textit{Permanent colours} [1813] (cit. n. 91), 1: 256.
but without producing any sensible diminution of this troublesome dark blue colour, until it disappeared in the usual way, by an apparent abrasion of the cuticle.’ The results were disappointing. He corrected his earlier account that had reported as credible ‘the fugitive nature of this ink,’ once again invoking the authority of samples to speak reliably of exotic dyes at a distance. ‘I have before me, both parchment and paper,’ he announced, ‘on which I wrote with [this ink] … seven years [ago.]’ Its writing was still clearly visible. But he had to concede that trials he conducted using the dye on calico had failed; the ripe fruit proved utterly useless and *Genipa*’s candidacy as an alternative to indigo lay in ruins.\(^{104}\)

Colour was a natural trickster and, as such travails suggested, threatened to make a mockery of both experimental and cultural control. Bancroft underscored this theme further, recounting some outrageous pranks that preyed on the confusion over whether such juices and inks were permanent or fugitive, linking them to analogous confusions and anxieties about skin staining and racial status in colonial societies:

Francis Ximenes mentions that tricks were sometimes practised with the juice of this fruit, by privately mixing it with rose water, and giving it to the ladies in New Spain; and Dutertre, in his account of the French West India Islands, writing of this tree says, ‘il porte le *fard* des chambrières nouvellement venues.’ He adds that the simple maid servants, who … came to the West Indies from France, were told upon their arrival, that unless they washed their hands and faces with the (colourless) juice of this fruit, their skins would become *black*, and that, believing this, they eagerly collected and applied the supposed means of preserving their complexions, and were astonished, soon after the application, to find their faces and hands covered with a hideous dark blue stain, which none could remove for nine or ten days. He indeed mentions his having married considerable numbers of them, before this stain had been removed, and repeats the fable respecting the supposed frauds which might be practised by using the juice of this fruit as a substitute for ink.\(^{105}\)

\(^{104}\) Bancroft, *Permanent colours* [1813] (cit. n. 91), 1: 256, 259–260, 262. Elsewhere he described his samples as literally writing their own truth. ‘I have now before me some very *black* writing upon calico, which states *itself* to have been written with a solution of nitrate of quicksilver, upon calico impregnated by a mixture of soda, liver of sulphur, and sugar, in water: seventeen years have elapsed since this writing was performed, and there is no appearance of that *revivification* of the mercury.’ *Permanent colours* [1813] (cit. n. 91), 1: 331.

\(^{105}\) Bancroft, *Permanent colours* [1813] (cit. n. 91), 1: 257.
As I have argued elsewhere, invocations of the authority of dyers’ ability to modify the colours of fabrics played a significant role in evaluating the likelihood of human colour change. As the Virginia physician and theorist of skin colour John Mitchell had reckoned in the 1740s, the notion that African skin could be effectively whitened was undermined by evidence that ‘dyers can very easily dye any white Cloth black, but cannot so easily discharge that Black, and bring it to its first Colour.’¹⁰⁶ The joke Bancroft retold played with cruel literalness on trust in dyeing’s ability to underwrite a proper understanding and management of skin colour, while at the same time turning on exposing trust in the relation between dyes and permanent ‘true’ colours as misguided.

Fabric staining rather than skin staining was what concerned Bancroft. Setting such failures and tricks aside, he worked hard to situate his work in relation to the new languages and practices of the leading French chemists, and cast his own experimental work both as intervention on the need for explanations of dyeing based on chemical affinities and, in an even bolder move, in fundamental debates in natural philosophy concerning Newtonian doctrines of light and colour. Where Bancroft had once presented himself, in the context of debates about electric fish, as the humble Creole empiric whose rhetorical credibility relied on exotic sensory experience, he now assumed the voice of the causal philosopher, whose universal accountings he deemed essential to any properly systematic knowledge.¹⁰⁷ Bancroft sought to render himself philosophically visible by tying his experiments into discursive networks of physical science in relation to established authorities, specifically Berthollet and Newton. Quercitron was not just a commercial dye, therefore. As a ‘pro-substantive topical colour,’ it was crucial support for his affinity theory of dyeing, and thus, ultimately, for his philosophical self-making.¹⁰⁸

¹⁰⁶ John Mitchell, ‘An essay upon the causes of the different colours of people in different climates,’ Philosophical transactions 43 (1744–1745): 148; James Delbourgo, ‘The Newtonian slave body: racial enlightenment in colonial Virginia’ (forthcoming). While discussing ‘Whites,’ ‘blacks,’ and ‘reddish-brown aboriginal Natives,’ in the Natural history of Guiana (cit. n. 11), Bancroft suggested that miscegenation did not in fact erase fixed differences between such peoples: the ‘promiscuous intercourse of these different people, has likewise generated several intermediate casts, whose colours immutably depend on their degree of consanguinity to either Whites, Indians, or Negroes. These are divided into Mulattoes, Tercerones, Quarterones, Quinterones, with several intermediate subdivisions, proceeding from their retrograde intercourse: all which sufficiently demonstrate, that neither promiscuous generation, nor change of climate, can annihilate the natural characteristic of these different people’: pp. 251–252.

¹⁰⁷ Réaumur, whose mechanical theory of eel shocks Bancroft had criticized years before, reappeared as a target in the context of discussions over the mechanism by which the Buccinum (whelks) produced the colour purple: Permanent colours [1813] (cit. n. 91), i: 138.

It was important to identify two fundamental varieties of dye, Bancroft maintained: the 'substantive', which required no fixative or mordant, and the 'adjective', which required a fixative to hold fast. In addition to this taxonomic gesture, he urged that dyeing could not be understood in terms of purely mechanical corpuscular interactions. It had to be grasped as an interplay of specific chemical affinities, whereby the same dyes combined with variable strength and permanence according to whether they were applied to wool, linen, cotton and so on.  

This was neither an entirely original claim nor a wholesale embrace of what scholars would later identify, problematically, as core elements of the Chemical Revolution. Pierre-Joseph Macquer, Berthollet's predecessor at the Gobelins, for example, had worked on notions of chemical affinity in dyeing since the 1770s. And while Bancroft's writings imported much of the new French chemical nomenclature, they strikingly lacked any significant engagement with instruments of precision for weighing and quantifying chemical substances, the regimen so strenuously championed by Lavoisier. Nevertheless, Bancroft consciously strove to align himself with what he called 'the language of modern chemistry, and with a few exceptions, the principles or explanations of modern chemistry, not as being wholly unobjectionable, but as according best with known facts.' 'Truly respectable chymists,' he granted, might still adhere to Stahlian phlogiston theory, but, concluding with customary calculated risk, 'there can be no difficulty in foreseeing which of these systems must prevail.'

The establishment of a hierarchy of philosophical explanation over experimental practice was now deemed indispensable. 'Accidental discoveries' had driven the art of chemistry, yet 'theory' and knowledge of 'true principles' and 'causes' would 'prove useful in the highest degree.' Most dramatically, the practical work of experimental dyers and calico-printers like himself pointed to the inadequacy of a Newtonian understanding of the very nature of light and colour. Admittedly it was possible to separate the different colours of rays of light by use of a prism, and demonstrate differential refrangibility. 'Yet the permanent colours of different bodies, or substances, are not, as I believe, produced by mere refraction, and Sir Isaac Newton must have been misled by analogy when he extended his discoveries and conclusions respecting the transient colours resulting from the refractions of light, by pellucid colour-

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112 On this theme, see Roberts, Schaffer and Dear, The mindful hand (cit. n. 86).
less substances, to the permanent colours of various kinds of matter.”

The permanent colours of bodies in fact derived from chemical affinities by which matter absorbed or reflected light rays, and thus produced greater or lesser amounts of ‘oxygene’—the ‘constituent part of colouring matters.’ Thus, from the midst of his embattled attempts to ship and market Quercitron as an industrial dye, the Creole fortune-seeker suddenly emerged with philosophical solutions to hoary Newtonian mysteries of matter, light and colour. His experiments, whether successful in producing new dyes or not, also yielded precious insight concerning the quantity of oxygen contained in plant stuffs as an effect of exposure to sunlight. Even his semi-farcical trials with the Genipa or Mauna pointed, importantly, to the decisive role of oxygen in coloration, its chemical affinity or disaffinity with certain species of vegetable life, and the problematic disaffinity between his mordants (‘alumina, and the oxide of iron’) and the dye in question. Invisible ink, likewise, was a chemical compound that could be fabricated by simple manipulation of its oxygen content, by combining it with ‘sulphuretted hydrogen gas’ to drain its colour by ‘an abstraction of the oxygen, to which the ink owed its blackness.’ Apply the ink to paper, and ‘it will regain its oxygene, and its lost colour.’

Bancroft’s combined commercial and philosophical opportunism enacted and envisioned the co-ordination of imperial resources from East and South, as well as West. Discussing at length the chemical behaviour of the legendary indigo, he sought to mimic the strategies of imperial botanical transfer that Banks had recently made central to British policy, by introducing the ‘nerium tinctorium or tsit ancalloo’ (the rose bay of English dyers), which he claimed to have been shown at the London offices of the East India Company, and whose cultivation he confidently projected in the West Indies and St. Helena. He also credited himself with helping to establish the new chemical nomenclature across the empire. Relating several experiments conducted with indigo by the Calcutta-based surgeon turned botanist William Roxburgh, he noted expressly his forbearance in initially refraining from altering Roxburgh’s chemical terminology, that of the ‘exploded’ system of phlogiston theory. But he went on to claim to have converted Roxburgh, whom he counted as both correspondent and specimen-supplier, to the new chemistry. ‘I am now a convert to his opinion, viz. that vital air, or oxygene, is the colouring principle in indigo,’ he quoted Roxburgh as having written him.

Bancroft’s highly strategic

113 Bancroft, *Permanent colours* [1813] (cit. n. 91), 1: lix, vii, 34.
reading of recent abolitionist literature for commercial advantage was equally striking in its resolute manipulation of imperial resources, even in the midst of ardent challenges to the existing system. He commented repeatedly on the botanical intelligence painstakingly gathered by the leading campaigner Thomas Clarkson, concerning West African dyes, woods and key crops like cotton. Bancroft—no longer, it seems, quite the same person who had written Charles Wentworth a quarter-century earlier—reversed with indifference the reading strategies of abolitionists who drew chilling evidence and stirring arguments from utilitarian travel accounts, as he excerpted Clarkson’s economically interesting remarks on African commodities while ignoring the moral objective of their original mobilization.  

Most remarkable of all, the consummation of Bancroft’s career powerfully synchronized social and intellectual histories of new knowledge and imperial expansion in an original mutual relation. At the personal level, he had essayed a remarkable transformation from Creole empiric to metopolitan philosopher through his chemical work. But his was more than a personal journey. It involved a broader relation between hierarchies of place and cognition that found expression in his historical vision of the significance of chemical philosophy, whose achievements now took their place in a comparative world-historical narrative of colour and culture, knowledge and arts, which cast philosophical understanding as a uniquely modern European achievement.  

Bancroft gave a general account of the history of dyeing in his Philosophy of Permanent Colours. By no means a modern invention, he wrote, drawing heavily on Pliny, dyeing was a European inheritance from the ancient Greeks and Romans, and before them the Egyptians, Persians and Indians. Colour itself was an index of civilization, its level of refinement an indicator of cultural progress, whose primitive phase he doubtless fancied he’d glimpsed in Guiana. ‘Even in the rudest states of human existence,’ he recounted, people ‘have been disposed to admire and desire ornaments, depending on gaudy and varied colours; which, in the state of naked savages, they have generally applied to their skins, and afterwards to their garments, when they had approached so far towards civilization, as to manufacture and wear clothing.’ Exaggerated colour denoted primitivism, or opulence and excessive refinement; the absence

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117 Bancroft, Permanent colours [1813] (cit. n. 91), 1: 104–105, 225, 278; 2: 335–336. Interestingly, Bancroft appears to have backed the election to the Royal Society of Bryan Edwards, one of the leading opponents of abolition in the 1790s, on whose work he also relied (1: 105): certificate of election EC/1794/01, Royal Society Archives.

118 On the role of historical interpretation in apportioning global cultural significance to philosophical work in this period, see also the essay in this volume by Simon Schaffer.
of colour signalled cultural deficiency.\textsuperscript{119} Bancroft thus reckoned morally and historically the contrast between indigenous and European cultures of colour. A full global history of ancient dyeing was both impossible and perhaps even unnecessary, he noted, since early techniques ‘would have been considerably advanced, by fortunate accidents and instructive observations, long before they had learned to write histories and record facts’: haphazard empiricism that lacked philosophical purpose. Such an inheritance could have little interest either for ‘practical dyers, or speculative men.’ ‘Savage tribes’ might be masterful at changing the colour of skin, hair, feathers and quills, but they were ignorant of the improvements philosophers had made through the use of mordants for greater permanence.\textsuperscript{120} They might possess colour, but only we understand it. It was similarly important to point out that ‘the formation of an acetate of alumina, and its application as a mordant in calico-printing, was not an oriental discovery,’ and that ancient Indian calico-printing, ‘encumbered with useless parts,’ had finally been refined into a rational art. Europeans were masterful cultural go-betweens, it turned out, because they were microphysical masters of the very media that could bond nature’s different bodies. It was the use of modern mordants—\textit{which Bancroft defined specifically as the ‘intermedia’ between fabrics and colorants}—that ranked Europeans above savages and exotic ancients. Philosophical chemistry thus made reassuring sense of the global politics of skill and explanation in an era of resistance, revolution and imperial reorganization.\textsuperscript{121}

\textbf{CONCLUSION: THE TWO-HEADED SNAKE}

One of the more peculiar phenomena discussed in the \textit{Natural History of Guiana} was the alleged existence of double-headed snakes. That such creatures held more than passing significance for Bancroft is suggested by the book’s frontispiece (Figure 6)—the only image Bancroft ever produced in a publication. He reported local accounts by Amerindians of a twelve-inch snake, as large as the stem of a tobacco pipe, with a head at each end. Double-headed creatures were a common symbol of the shaman’s powers in the Amazon region; shamans’ ceremonial stools were often carved with double bird or jaguar heads. But Bancroft was doubtful. On examining a specimen closely himself, he found but a single mouth. ‘Whether Naturalists have been deceived concerning the other kinds of \textit{Amphisbaenae}, in different parts of the world, from the appearance of their tails, I am uncertain,’ he admitted; ‘the smallness of the snake renders the deception easy.’ Nature, he considered, abhorred such duplicity. Yet he noted that a similar snake had also been reported near Lake

\textsuperscript{119} Bancroft, \textit{Permanent colours [1813]} (cit. n. 91), 1: xliii–iv, xix, xli.

\textsuperscript{120} Bancroft, \textit{Permanent colours [1813]} (cit. n. 91), 1: xxxvii, xxxix.

\textsuperscript{121} Bancroft, \textit{Permanent colours [1813]} (cit. n. 91), 1: 371, 343–344.
Champlain in New York. This time the source was a British army officer who, charged with surveying the lake, had, again, been alerted to the presence of these serpents by Indians. Specimens had been found in a nearby bay, recently rechristened ‘Double-headed Snake Bay’ on local maps. This was the creature that adorned the frontispiece, rendered by ‘one of his Majesty’s Draughstmen,’ and described by Bancroft as possessing two necks of equal size, ‘to each of which was joined a perfect head, with two eyes, a large mouth and throat, [and] a forked tongue.’ The animal was ‘a perfect monster,’ he conceded, ‘of whose existence I should strongly doubt, did I not think the veracity of the Gentleman, from whom I have this information, and by whom it was actually killed, unquestionable.’ As empires expanded the knowable world for Europeans, so they contracted the range of those who could know it. Indians could find monsters, but only gentlemen could declare them real.

A century after Bancroft’s stay in Guiana, the German naturalist and traveller Karl Ferdinand Appun made his way through the Orinoco region of then British Guiana. In his last days in 1872, Appun lived in fear of attack from Amerindians and, perhaps, their avenging spirits. According to one account, he slept with a bottle of sulphuric acid at his bedside for self-defence.

122 Bancroft, Natural history of Guiana (cit. n. 11), pp. 213–215.
but died that year as a result of accidentally spilling the acid on his own face. Bancroft’s travels, too, involved a relationship between intercultural encounter and modern chemistry, although a rather less antagonistic one. Instead of isolating his careers as diplomat, spy, pamphleteer, novelist, natural historian and chemist, the aim of this essay has been to take a traveller in the age of revolutions who moved repeatedly between cultures, allegiances and regimes of scientific authority, and examine how techniques of self-translation worked across genres and settings. Despite the culminating emphasis of his work on the chemistry of permanent colours, Bancroft’s essential skill was in marking himself with fugitive colours, allowing him to appear in different contexts without forfeiting trust or credibility. The scene in which he described his attempts to wash off the Genipa juice with which he’d accidentally stained himself in Barbados was not just one of social comedy, therefore, but political necessity. To indigenous Amazonian peoples, strangers’ participation in their customs signified their partial incorporation, their changing and becoming closer in essence to their hosts. The go-between’s fundamental art, meanwhile, was both to perform such movements and, crucially, also to suppress the traces of multiple incarnations, lest they create an impression of dangerous fluidity rather than the image of the trustworthy broker.

One aim of this story has been to show how, if we follow individual careers across borders, Creole knowledge often did not take the shape of a patriotic epistemology that pit peripheral experience heroically against metropolitan conjecture, but converted itself into forms that knit journeyman ambition together with imperial purposes. Bancroft was an imperial Creole. Single national frameworks—and for that matter uniform disciplinary frameworks—are simply too limited to capture the multiplicity of itineraries, allegiances and practices pursued by many of the traffickers who navigate extended geographies of scientific and political activity. Bancroft’s is not an American or British story, nor one that relates singly to chemistry or to natural history. Rather, his is the untold story of the improvised intersections between geographic and epistemic domains. As such, it disturbs the neat integrity of nationalist and disciplinary frameworks, brings greater awareness of how such frameworks have traditionally apportioned historical visibility and invisibility, and urges the adoption of more fluid perspectives to exhibit connections between places and practices in the making of global knowledge.


Bancroft moved across cultures, disciplines and allegiances with virtuosoic cunning. Although he ultimately counted himself a financial failure, the successful concealment of his true allegiances long outlived him. Far more than a case-study in journeyman science or colonial entrepreneurialism contending with an age of industrial incorporation, Bancroft was an expert shape-shifter who not only lived as a go-between but also dramatized and theorized the art of going between, personally and philosophically. Most importantly, his transformation from Creole empiric and seeming critic of empire into chemical philosopher and imperial profiteer depended from start to finish on his experience among indigenous peoples, whose uncertain co-operation had made possible the European settlement of Guiana. It was they who furnished the materials of his self-making and his constant self-reinvention. Early on, Charles Wentworth had reflected on the position of the enlightened exile and dramatized a contest between experimental apparatus and indigenous belief, as Gordon tried in vain to use his knowledge of electricity, chemistry and medicine to turn his Arawak hosts from their trust in the powers of their peii. Wentworth thus registered the weakness of enlightenment’s instruments to unsettle indigenous belief in shamanic conjuring. The Natural History’s ostensible chauvinism about indigenous knowledge, however, was belied by the seriousness with which Bancroft scrutinized the materials and practices of Guiana’s native cultures. In his pursuit of inks, poisons and dyes, he aimed at nothing less than a consummate mimicry of the powers of the shaman—the indigenous go-between who, through acts of self-transformation, translated natural resources into weapons and cures and interpreted their cosmological significance for his community. These were the roles Bancroft himself sought in translating his Guiana experience into the Philosophy of Permanent Colours, as he linked his expertise in American dyestuffs with a global natural history of colour-making. Moving well beyond a Plinian account of the geographical provenance of materials, Permanent Colours constructed a world-historical hierarchy that ranked chemical explanation as the apex of human achievement in colour, above ancient arts and indigenous empiricism.125

Ignoring the remarkable depth of transformative experience within indigenous cosmology, Bancroft contrasted allegedly static indigenous practices with the progress of European explanation. The seemingly low and nefarious art of going between was thus improbably raised to the status of a signal distinction between us and them. They might be locally artful, but only we can move between cultures and make causal understanding. Although it would be several decades before Europeans began to transcend the mediations and

125 My account shows how chemical narratives of this era were not shaped exclusively by domestic or European factors, but also by extended imperial geographies. On enlightened chemical narratives in Britain, see Jan V. Golinski, Science as Public Culture: Chemistry and Enlightenment in Britain, 1760–1820 (Cambridge: Cambridge University Press, 1992).
negotiations of long-range dyestuff trades to achieve their own mastery of synthetic colour-making in the nineteenth-century chemical laboratory, Bancroft’s account already conceived of Europeans as unique masters of colour.¹²⁶ Not coincidentally, this hierarchy aligned exactly with his own transformation from Creole empiric to imperial natural philosopher. Indeed, so complete was the transformation, so consummate the management of contradictory performances, that Bancroft seems to have made that former self disappear completely. ‘The only treatise on Dyeing extant that deserves consideration is … that of Berthollet,’ noted the author of a nineteenth-century handbook on practical dyeing. ‘Dr. Bancroft’s work ranks next, but it is of little or no use in the dye-house, being too exclusively theoretical.’ Such vanishings were, paradoxically, the sure traces of the go-between.¹²⁷

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¹²⁶ See the later sections of Ball, Bright Earth (cit. n. 88), chap. 9.
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