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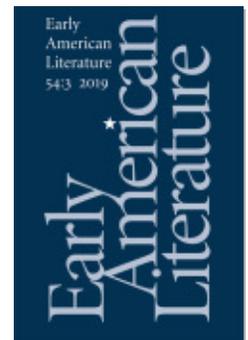
Bioprospecting Breadfruit: Imperial Botany, Transoceanic
Relations, and the Politics of Translation

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Bioprospecting Breadfruit

Imperial Botany, Transoceanic Relations, and the Politics of Translation

Abstract: This article traces the breadfruit tree's strange career as an eighteenth-century superfood, its journey from the Pacific world to the Caribbean islands, and the rhetorical practices, epistemological slippages, and linguistic permutations that undergirded these developments. Comparing indigenous, Spanish, English, Dutch, French, and US-American descriptions of the breadfruit tree, the essay not only argues for a more sustained engagement with multilingual and comparative sources but also examines the role of translation in eighteenth-century natural history writings. Translation was crucial not only for the transmission of information from one language to another but also as a means to modify, correct, or even manipulate the latest scientific findings. This article focuses on the ramifications of "motivated mistranslation" for European and early American empire building and underscores the role of natural history in facilitating and sustaining transoceanic plantation economies.

Keywords: transoceanic plantation economies, natural history, translation, early Republic, bioprospecting, Georgius Everhardus Rumphius, Joseph Banks

In 1793, two British ships, aptly called the *Providence* and the *Assistant*, docked in the Jamaican harbor of Port Royal. A "floating forest" aboard the vessels attracted excited onlookers, drawing visitors "of every rank and degree" to the waterfront (G. Tobin 302). They had eagerly anticipated the ships' arrival and watched with excitement as their curious cargo was transferred to the shore. The *Providence* and the *Assistant* had brought to the West Indies over a thousand Tahitian breadfruit tree saplings, finally completing what had begun in 1787 as the most ambitious botanical transplantation scheme the British Empire had ever attempted. It had taken years of planning, the investment of thousands of pounds, two expedition attempts, and dedicated crews of hundreds to ship the saplings halfway around the world. The plants that survived the lengthy transoceanic jour-

ney were delivered to the botanical gardens of St. Vincent, Barbados, and Jamaica, and to local sugar plantations, where breadfruit was to provide a low-cost, low-maintenance food for the enslaved (Newell 163–66).¹

At the end of the eighteenth century, breadfruit had emerged as one of the most desirable botanical commodities in Europe and the Americas.² This article traces the plant's strange career as an eighteenth-century superfood, its journey from the Pacific world to the Caribbean islands, and the rhetorical practices, epistemological slippages, and linguistic permutations that undergirded these developments. By examining the changing conceptions of the plant in indigenous accounts and early imperial records this article underscores the role of natural history in facilitating and sustaining transoceanic plantation economies. Drawing on indigenous origin stories, travel accounts, natural histories, private correspondence, and newspaper reports, I first investigate how British imperial officials turned breadfruit into a cheap food source for enslaved people. In a second step, I explore the plant's resurgence in the political and diplomatic circles of the early American Republic, where politicians initially cast the plant as a quintessentially democratic crop, only to later revert to familiar British positions of propagating breadfruit as an ideal plantation staple. By juxtaposing English-language descriptions of the breadfruit tree with sources from various Pacific Islands and Spanish, French, and Dutch imperial records, this essay reveals how a multilingual approach to natural history allows us to trace the circulation of pre-Linnaean botanical knowledge beyond imperial and linguistic boundaries. In doing so, it highlights the crucial role of translation for the dissemination and manipulation of scientific knowledge.

Over the course of the seventeenth and eighteenth centuries, the importance of Latin as *lingua franca* of scientific communication had declined steadily while the rise of European vernacular languages and the explosion of scientific publications in these languages created an unprecedented need for translation. Fania Oz-Salzberger and others have pointed out how the medium of translation served as a “crucial vehicle of diffusion,” disseminating Enlightenment thought, science, and culture across Europe and beyond (181).³ Yet as Maeve Olohan and Myriam Salmara-Carr have argued, scholars studying natural history have displayed “little interest” in investigating the role of translation for the exchange of scientific knowledge (179). Conversely, they note, translation studies scholars have

also “not engaged much with the study of scientific discourse or of scientific knowledge” (179).⁴ With this article, I want to probe the interstices of translation studies and natural history by investigating the politics of material and linguistic translation in imperial botany, and the ways in which translations shaped and revised existing conceptions of nature and the environment.

Building on the definition of *translation* in the *Oxford English Dictionary*, I see translation not only as a linguistic process, in the course of which meaning is conveyed from one language to another, but also as a form of physical movement, describing the transference of a person, place, or condition to a new environment (“Translation”). Viewed in these broader terms, the transplantations of the breadfruit tree from the East Indies to the West Indies, and later to the United States, constitute examples of such a material translation. Linguistic translation, by contrast, occurs when descriptions of the breadfruit tree circulate in different languages, building upon and borrowing from each other.

In tracing the material translation of the breadfruit tree, I draw upon the work of Alan Bewell, who conceives of natural history as “a project of material and cultural translation on a global scale,” because it successfully “disembedd[ed] global natures from the material entanglements and the local forms of knowledge that had previously governed their understanding so that they could be integrated into a world system of information exchange” (35). Tracing the transformations that emerge in the process of disembedding is crucial, according to Bewell, because they show us where and when changes in the conception of nature occurred, revealing how plants and animals that were translated to new contexts “were understood in new ways and put to new uses” (43). Unlike Bewell, however, I also consider the linguistic dimension of the translation process. By looking at the ways in which descriptions of the breadfruit tree traveled between languages, I tease out how linguistic translation similarly affected our understanding of nature. In doing so, I am especially interested in the ways in which translation was deployed to serve specific political and colonial agendas.

Addressing questions of agency in and through linguistic translation, translation studies scholars such as Lawrence Venuti, Susan Bassnett, André Lefevere, Eric Cheyfitz, Maria Tymoczko, and Edwin Gentzler have long pointed to the “partial nature of translations” and their potential to function as “an exercise of power” (Tymoczko and Gentzler xviii). Tymoczko

and Gentzler in particular have outlined how linguistic translation not only consists of “deliberate and conscious act[s] of selection, assemblage, structuration, and fabrication” but may also include “falsification, refusal of information, counterfeiting, and the creation of secret codes” (xxi). The underlying manipulative potential of translation has recently also gained currency in American literary history, most notably with the publication of Anna Brickhouse’s *The Unsettling of America*. In this book, Brickhouse develops the concept of “motivated mistranslation,” a strategy used by an indigenous interpreter to interfere with and dismantle Spanish colonization plans (19). This interpreter deliberately relays inaccurate information and thus alters and impedes the dissemination of indigenous and imperial knowledge. As I study the documents surrounding the transoceanic transplantation of the breadfruit tree, I am also interested in motivated mistranslation. My example of motivated mistranslation, however, was not dispatched by an indigenous interlocutor as an act of empowerment, but by a British imperial agent as a way to dilute scientific findings, information that would have revealed the fundamentally inhuman nature of his government’s transplantation enterprise. I argue that this particular case of motivated mistranslation not only provided the ideological underpinnings for the British breadfruit transplantation scheme but also redefined the relationship between the empire’s imperial center and its possessions on the periphery.

By transplanting the breadfruit tree from the Pacific island of Tahiti to the British possessions in the Atlantic, the British government created transoceanic exchanges between two colonies that complemented the existing bilateral relations between the metropole and the colonies. To take these transoceanic connections seriously, I suggest, throws into even sharper relief the global reach of eighteenth-century natural history, and helps us to see how spaces that seem disconnected and far apart not only influenced each other but also changed imperial policies in the metropole. Examining colonial bioprospecting and the breadfruit transplantation scheme through a transoceanic lens, then, underscores the connections between the Pacific and Atlantic worlds and reveals how events occurring in the American colonies and the nascent United States influenced British imperial policies. The shadowy presence of the early United States in eighteenth- and early nineteenth-century world affairs, literary historian Michelle Burnham has argued, can be especially well accounted for

through a transoceanic approach, because it “asks us to imagine America as both there and not there, at once central to and yet profoundly decentered from the globe and its connections” (170). The British breadfruit transplantation scheme and its consequences for the American continents is an interesting case in point. Tracing the breadfruit’s circuitous path from the East Indies to the West Indies and its introduction into the United States helps us to understand how the early United States not only forged vertical connections across the American hemisphere, but also created lateral relations that extended to the Caribbean and southeast Asia, linking the nascent United States to a global plantation economy “via the sinews of empire” (Roberts and Stephens 10).

European explorers encountered breadfruit in most parts of southeast Asia and Oceania. Called *soccon* in the Dutch East Indies, *rīma* on Guam, and *uru* in Tahiti (Forster 41), breadfruit was an important food staple for the indigenous populations of the South Pacific, albeit one that was cherished not because of its flavor and nutritional value, but because of its abundance and ease of conservation. Breadfruit trees bore three crops a year, yielding fruit from October through June. During this time, the fruit was harvested and directly transferred into an oven, where it was baked for several days, making it ready for consumption. The fruits that were designated for preservation were moved to large communal storage pits. These dugouts in the soil were lined with leaves, holding peeled and deseeded breadfruit that was tightly packed into the hole to ferment. The paste that resulted from this process kept for over a year and, when taken out, needed to be processed further through pounding, kneading, baking, and cooking to become a component of many local dishes. As drought, famine, and war often ravaged the islands in the South Pacific, the fruit’s easy preservation made the plant especially valuable to the local inhabitants (Rangone 207–13).

The notion of breadfruit as a last-resort victual, a foodstuff mainly to be used in times of great scarcity, is underlined by Pacific legends that describe the origins of the plant. In Tahitian mythology the origins of the breadfruit tree go back to a starving family whose father decided to sacrifice himself in order to provide for his wife and children. A famine had crippled the island, leading the father, his wife, and their four children to retreat to a mountain cave where they lived off the few ferns and herbs they could find. But the family’s situation became desperate, so one evening the

father said to his wife: "When you awake in the morning, go outside, and you will see my hands which have become leaves; look at the trunk and two branches of the tree, and they will be my body and legs; look at the round fruit upon it, which will be the cranium of my head, and the heart inside of the fruit will be my tongue" (qtd. in Craig 68). The next morning, the father was gone. As he had predicted, a magnificent tree had sprung up overnight, bearing the fruit that ultimately saved the family. The wife, however, was stricken with grief over her husband's sacrifice. She named the fruit *'uru*, meaning the head of her dead husband (Craig 67–68).

On the Melanesian island of Vanuatu, the origins of breadfruit are similarly connected to hunger and the death of an important family member. Here a mother seeks out her oldest daughter in a distant village, not knowing that she has long passed away. When she arrives in the village with her youngest daughter in tow, she learns about the older daughter's death and grieves so intensely that the spirit of the dead daughter returns to chat with her. During their conversation, the youngest daughter begins to wail and cannot be pacified because she is so hungry. Promising food to her sister, the older daughter disappears. When she returns, she cuts off one of her breasts and offers it to her mother, so she can provide food for her youngest child. From this breast, the first breadfruit tree emerges, spreading on the island and beyond (A. Walter 10).

Finally, in the Hawaiian origin story, the breadfruit tree grew not from a father's head, but from the testicles of a dead man. Not knowing where this new food came from, lesser Hawaiian gods became interested and decided to try it. They disliked it when eaten raw, but found it delicious when it was roasted. The lesser gods informed the higher gods Kane and Kanaloa about their culinary discovery, but were told that they had been eating the testicles of a dead man. Nauseated by what they had ingested, the gods became violently ill and, through their illness, disseminated breadfruit across the archipelago (Rangone 217). In each of these stories, then, breadfruit is represented as an important food source in times of famine. Its association with illness, death, and the dismemberment of body parts highlights the plant's unappetizing qualities and emphasizes its function as a last-resort foodstuff. In Tahiti, Vanuatu, and Hawai'i, breadfruit consumption emerged out of bare necessity, and was intimately connected to the transformation of vital body parts (head, breast, testicles), ensuring the population's material, intellectual, and reproductive survival.

The records of the 1595 Mendaña expedition, sent out by the Spanish Crown to establish a colony in the Solomon Islands, contain the first Western description of the breadfruit tree. In their brief account of the plant, the expedition members reported that the native population considered the fruit “healthy, and of much substance” even though it resembled “a doughy mass with little juice when ripe, and even less when green.” The locals, the explorers further said, cultivated breadfruit near their houses, and with the exception of the thin rind, used every part of it (Suárez de Figueroa 246).⁵ Most of the travelers who succeeded the Spanish in the Pacific, however, overlooked the plant’s versatility. Only James Cook’s expedition artist Sydney Parkinson mentioned tools, boats, food wrappers, and clothes made from breadfruit products (45–46), while the French navigator Louis Antoine Bougainville briefly commented on the use of breadfruit wood for canoes (211–12). English travelers became particularly obsessed with breadfruit as a food source even though, as I show in the next section, their assessment of the plant’s taste and nutritional value was rather lukewarm.

The analogy between the plant and bread was created by the English explorer William Dampier, who upon his visit to the Mariana Islands in 1686 encountered an apple-like fruit that the inhabitants of the island of Guam seemed to “use . . . for Bread” (297). “[T]hey gather it when full grown, while it is green and hard,” Dampier reported, “then they bake it in an Oven.” “During the baking process,” he continued, the fruit develops an “outside black crust” and a “soft, tender, and white” inside, “like the crumb of a Penny Loaf” (297). Based on his observations on the preparation of the plant and its crumb-like texture, Dampier named this curious fruit the “Bread-fruit” (296). But when we compare his description of breadfruit with his depiction of other plants he encountered during his voyage, it becomes obvious that he did not think that the breadfruit tree was special beyond its novelty. In the next chapter of his account, Dampier dedicates more than four full pages to the plantain. This “King of all Fruit,” he writes (311), resembles “Butter in Winter,” is “of a delicious taste, and melts in ones [sic] mouth like Marmalet” (313). Like breadfruit, plantain is sometimes “used for Bread” and “[p]oor people, or Negroes, that have neither Fish nor Flesh to eat with it, make Sauce with Cod-pepper, Salt and Lime-juice” (313). This, Dampier explains, makes the plantain “very savory; much better than a crust of Bread alone” (313). For these people, Dampier continued, “a ripe raw plantain and a roasted plantain together,” could

even be used “instead of Bread and Butter,” making “a good meal in this manner” (314). Serving simultaneously as butter, marmalade, and bread, plantain, in Dampier’s mind, was vastly superior to breadfruit, and even provided “a good meal” to “[p]oor people, or Negroes.”

Subsequent British accounts continued to offer mixed reviews of breadfruit. In 1748, the members of George Anson’s crew related how breadfruit “was constantly eaten by us during our stay upon the Island [of Tinian] instead of bread, and so universally preferred to it, that no ship’s bread was expended during that whole interval” (R. Walter 310). When green, this crew member observed, “its taste has some distant resemblance to that of an artichoke bottom, and its texture is not very different, for it is soft and spongy.” “As it ripens it grows softer and of a yellow colour,” the crew member continued, “then [breadfruit] contracts a luscious taste, and an agreeable smell, not unlike a ripe peach” (310). In this more mature stage, however, the fruit was no longer edible. “It is esteemed unwholesome,” the crew member wrote, “and said to produce fluxes” (310). The account of James Cook’s first Pacific voyage, published in 1773 by John Hawkesworth, also only offered a mixed assessment of the breadfruit tree as a foodstuff. “The eatable part lies between the skin and the core; it is as white as snow, and somewhat of the consistence of new bread,” the account read, explaining further, “it must be roasted before it is eaten, being first divided into three or four parts: its taste is insipid, with a slight sweetness somewhat resembling that of the crumb of wheaten-bread mixed with a Jerusalem artichoke” (80–81).

Even Joseph Banks, who had sailed with Cook on his first Pacific voyage and who would later emerge as the breadfruit tree’s most ardent champion, did not like it. Just like Dampier, he preferred plantain because it “agreed much better [with him] than the bread-fruit did” (117). Breadfruit, he noted in his journal, was only “acceptable” because the crew’s bread was “at present so full of vermin that, notwithstanding all possible care, I have sometimes had twenty at a time in my mouth” (117–18). Banks was even more put off by fermented breadfruit paste, or *mahi*, a food he found “sourish,” but which helped the indigenous populations of the South Pacific to overcome periods of food shortage and famine. “Custom has, I suppose, made this agreeable to their palates,” Banks concluded, “though we disliked it extremely” (138).

Although unconvinced by the breadfruit’s taste, Banks was impressed

with the plant's extreme productivity and perceived near-labor-free cultivation. "[T]hese happy people may almost be said to be exempt from the curse of our forefathers; scarcely can it be said that they earn their bread by the sweat of their brow, when their chief sustenance, bread-fruit, is procured with no more trouble than that of climbing a tree and pulling it down," Banks surmised (134–35). And while the tree did not "[grow] here spontaneously," it demanded very little effort (135). Contrasting the ease of acquiring breadfruit with the labor involved in the production of bread, Banks noted:

[I]f a man in the course of his life planted ten such trees (which, if well done, might take the labour of an hour or thereabouts), he would as completely fulfil his duty to his own as well as future generations, as we, natives of less temperate climates, can do by toiling in the cold of winter to sow, and in the heat of summer to reap, the annual produce of our soil; which, when once gathered into the barn, must again be re-sowed and re-reaped as often as the colds of winter or the heats of summer return to make such labour disagreeable. (135)

Given the breadfruit tree's seemingly effortless cultivation and painless harvest, Banks seems to suggest, breadfruit was an almost Edenic fruit, providing nourishment and subsistence without demanding much labor.⁶ In his future advocacy of breadfruit, such circumstances overcame any objections he might have had to its off-putting taste.

When Banks returned to England after his three-year voyage with Cook, he received an enthusiastic welcome. The voyage and his studies of the natural environment in the South Pacific had made him a scientific figure of international renown, leading natural historians, politicians, and monarchs all over Europe to seek his advice on scientific and agricultural matters. In 1773, King George III appointed him the director of the Royal Botanic Gardens at Kew, and in 1778 Banks became the president of the Royal Society, Britain's most prestigious scientific organization. Over the years, Banks became increasingly able to influence the British government, and when a crisis developed in the empire's Atlantic possessions he acted as an important interlocutor for British politicians, imperial agents, and colonial merchants (Gascoigne, "Banks, Sir Joseph").⁷

In the 1760s, the tension between the metropole and its thirteen North American colonies had begun to rise, finally escalating when, on March 5,

1770, British troops fired into a Boston crowd, killing five men and wounding six. The incident soon came to be known as the Boston Massacre, sparking a new wave of anti-British protests. In order to quell the spirit of liberty in the American colonies, the British Parliament passed a series of acts that were designed to restrain colonial self-government and sought to isolate the North American colonies economically by restricting their trade with other British possessions, including their Caribbean colonies. While intended to harm the North American colonies, such efforts soon backfired. The West Indian islands depended on their northern neighbor for wheat and other grains, flour, cattle, fish, horses, and lumber, or as one Jamaican colonist put it, “all the necessaryes of humane life” (qtd. in Drayton 106). Britain’s restraining acts had apparently cut off the West Indies from their principal supplier, driving up the prices for imported foodstuffs. Planters from Jamaica, St. Vincent, and Barbados complained that, through the embargo on American goods, they incurred substantial additional costs for providing food for their slaves. Fearing more losses and long-term food shortages, the planters turned to Joseph Banks for help, inquiring “whether there was no possibility of procuring the bread tree, either in seed or plant so as to introduce that most valuable tree into our American Islands” (qtd. in Newell 148).⁸

In response to such inquiries Joseph Banks drew up a massive transplantation scheme designed to compensate for the loss of trade with the insurgent North American colonies. Together with his associates from the Royal Society, he crafted documents that instructed explorers, sea captains, and botanists to collect specimens of edible plants in the East Indies and bring their seeds, shoots, and saplings to the British West Indian colonies for cultivation. Colonial bioprospecting had been a part of the British Empire’s agenda from its inception, but so far had consisted mostly of specimen exchanges between the colonies and the metropole.⁹ Banks’s new transoceanic transplantation scheme, however, would connect the East Indies with the British possessions in the West Indian colonies. Even though it bypassed the metropole, the new transplantation scheme would boost the empire’s economy by lessening the colonies’ dependence on expensive metropolitan imports and on foreign goods.¹⁰

In a 1777 essay, D. Walker provided the economic and scientific rationale for such a scheme.¹¹ Titled “Of the Translation of Plants from the East to the West Indies,” Walker’s essay rooted his claim for the feasibility of the

transplantation of Pacific plants to the Atlantic colonies in the sheer geographical expanse of the British Empire. “[A]s the Territories now belonging to Britain profess every Climate from the Line to the Pole,” Walker contended, “they are . . . enabled to produce to perfection, every Plant which inhabits the Globe” (1). Special precautions were necessary, however, when the plants were taken out of their original environment to be perfected in the metropole. In the past, Walker explained, too many of them had “been brought from India, to live a wretched Life, or rather to be starved to death in European Greenhouses” (22). To avoid this outcome, Walker suggested the “translation” of botanical specimens. This gentler approach considered the plants’ “Soils, Stations, and every thing relative to their History and Culture,” as well as the “manner of preserving Seeds in a vegetating State, the Management of Plants during long Voyages, [and] the diversity of Climate in places of the same Latitude” (22). By transporting plants to environments that resembled their original habitats as closely as possible, Walker’s translation scheme thus sought to create a relatively seamless transition. In this respect, the Caribbean appeared to be the ideal environment for Pacific newcomers because problems of acclimatization and adaptation were minimal. “[T]he Climate of the Equinoctial parts of Asia is in nothing essentially different with regard to Plants from that of the Equinoctial parts of America and . . . in both its influence upon Vegetation is the same,” Walker observed (24). And there was ample precedent for the success of Walker’s proposal. After all, he argued, “Sugar, Rum, Rice, Indigo, Ginger, and Coffee are not the natural production of America but of Asia, and their Translation from the one Country to the other has as much as any thing raised the British Commerce to its present Grandeur” (35).

Walker’s emphasis on “commercial plants” clearly indicates that he envisioned his translation scheme as a large-scale imperial project that would be able to produce “the most beneficial consequences to the Commerce and Power of Britain” (35). Even though the metropole would not directly benefit from the lateral transplantation of plants from the East Indies to the West Indies, “so many branches in Trade” would profit immensely, turning “into a far more advantageous Channel for Britain” (22). Given that the most important colonies for the economy of the empire were situated in the Caribbean, Walker concluded that products that helped “our West India Islands” would “prove an inexhaustable [sic] source of National Wealth and National Grandeur,” underwriting the empire as a whole (22).

Envisioning the transfer of plants from the East Indies to the West Indies as a translation project that considered the specific climatic and geographical realities of the British overseas possessions and the metropole, Walker provided Banks with the scientific and economic underpinnings for his transplantation scheme.

While Walker offered general recommendations for the transplantation of East Indian plants to the Caribbean, his contemporary John Ellis specifically placed breadfruit at the center of such an operation. In a pamphlet titled *A Description of the Mangostan and the Bread-fruit* (1775) he juxtaposed the two trees, claiming that the mangostan was “esteemed one of the most delicious,” whereas the breadfruit was considered “the most useful of all the Fruits in the East Indies” (title page). As a naturalist and Royal Society Fellow, Ellis had examined some of the plant specimens Joseph Banks had brought back from the Pacific and was well aware of Banks’s fascination with the low-cost, low-maintenance productivity of the breadfruit tree.¹² Organizing, editing, and translating breadfruit testimonies from various explorers and naturalists, he carved out a rhetorical strategy that turned this mediocre East Indian fruit into a Caribbean superfood.

At the time of the pamphlet’s composition, Ellis worked as royal agent to the Caribbean colony of Domenica, and as such, was well acquainted with the demands from planters for more food supplies (title page). Ellis dedicated his breadfruit pamphlet to the Earl of Sandwich, first lord of the British Admiralty and James Cook’s patron. In his brief letter to the earl, he congratulated him on his “zeal . . . to promote the honour and the happiness of his subjects, in the late important enterprizes of discovery” while smartly tying his own interests of introducing the breadfruit tree in Caribbean to the earl’s supposed benevolent mission. “In hopes that posterity may have additional causes of gratitude to your Lordship,” Ellis wrote, “[I am] firmly persuaded, that the moment an object which seems conducive to the benefit of any part of the British empire is proposed to your Lordship’s consideration, . . . no endeavours on your side will be wanting, to obtain possession of it” (iii–iv).

Hoping to “incite the attention of the public to some circumstances in which they are deeply interested” Ellis proceeded to lay out the advantages of the breadfruit tree in great detail (5). Breadfruit, he argued, was “the most useful” plant of all, because it “afford[ed] a most necessary and pleas-

ant article of subsistence to many” (11). It “might be easily cultivated in our West India islands,” he further contended, “and made to supply an important article of food to all ranks of their inhabitants, especially to the Negroes” (11). By advocating for the introduction of breadfruit as a food for the black inhabitants of the West Indies, Ellis here makes a public case for what had been discussed behind the scenes at least since the planters had first turned to Joseph Banks, that is the transplantation of the breadfruit tree from the East Indies to the West Indies to provide food for enslaved people. As evidence for this argument, Ellis cited excerpts from the expedition accounts of Dampier, Anson, and Cook, as well as a passage from the works of the Dutch naturalist Georg Rumphius (11–16). While Ellis barely changed the breadfruit descriptions that he drew from his English-language sources, his modifications of Rumphius’s works were critical and reveal, I suggest, a deliberate textual intervention on Ellis’s part that helped him to manufacture evidence to prove not only that the breadfruit was a plant that had the potential to serve as an ideal nourishment for enslaved people but that its use as such had been tried and tested for generations in the Dutch East Indies, with considerable success and no known disadvantages.

Although Ellis publicly referred to Rumphius as another “voyager” who had “mentioned” breadfruit (11), he knew that he was in fact citing an extensive treatise on the plant, penned by a fellow botanist, who was known in the eighteenth century as the leading expert on East Indian flora (Beekman, Introduction, *Ambonese Herbal* 109). A man of German descent, Georg Eberhard Rumpf, or Rumphius, as he called himself, enlisted with the Dutch East India Company in 1652 and was deployed to the Indonesian island of Ambon. He requested to stay on after his military assignment, joining the Dutch East India Company’s commercial branch. While working as a colonial merchant, Rumphius began to explore the Ambonese flora. With the help of an impressive library shipped to him from Amsterdam and his wife, Susanna, a local woman of mixed-race descent, Rumphius began to collect, describe, and draw the plants of Ambon. Between 1660 and 1692, Rumphius compiled his monumental *Amboinsche Kruid-Boek* (*Ambonese Herbal*), uniquely combining Western botanical knowledge with indigenous perspectives (*Ambonese Herbal* 175, 177). His work was organized in twelve books that contained descriptions of more than twelve hundred plant species and almost seven hundred illustrations. Each entry offered a thorough description of the plant’s physiognomy, a section

on seasonal variation, a paragraph on its name in various East Indian languages, an explanation of its habitat, and finally an assessment of its uses and characteristics.

But as he catalogued the Ambonese flora, Rumphius encountered numerous challenges. In 1670, he lost his eyesight as a result of glaucoma. Four years later, an earthquake leveled Ambon, causing the death of his wife, his most important collaborator. Finally, in 1687 a fire destroyed the existing draft of the *Herbal*, forcing Rumphius to start over. He had initially penned his botanical descriptions in Latin, but was now unable to write himself. Without a scribe that mastered Latin, he began to dictate the entries to his assistants in Dutch. In 1697, the manuscript reached the Dutch East India Company's headquarters in Amsterdam, but was suppressed because the company's chief administrators were "persuaded that there were various items in these botanical writings which might have been of interest to the competition" (Beekman, Introduction, *Poison Tree* 10). More than thirty years later and almost four decades after Rumphius's death, Johannes Burman, the director of the Amsterdam Botanical Gardens, succeeded in obtaining the company's permission. He translated Rumphius's manuscript into Latin, and between 1741 and 1750 published Rumphius's *Herbal* in a bilingual Latin-Dutch edition. The *Herbarium Amboinense/Het Amboinsche Kruid-Boek* remained in print throughout the eighteenth century, but was not translated into English until 2011 (Beekman, Introduction, *Ambonese Herbal* 101).¹³ Rumphius's reputation as a botanist, however, preceded the publication of his work. In 1678, he was invited to become a member of the Academia Naturae Curiosum, Germany's oldest academy of science, and in 1737, the Swedish botanist Linnaeus called Rumphius's compilation a "precious work" because it described "the plantas officinales exoticas and their Healing powers so precisely, that he should be preferred to anyone else" (qtd. in Beekman, Introduction, *Ambonese Herbal* 100). Biologists today still refer to Rumphius's *Herbal* as an "invaluable historic source for the study of biological diversity . . . and an inestimable fund of information on tropical medical and economic botany" (Buenz et al. 59). Even in his own time, Ellis must have known that he was drawing on the work of an expert and a colleague, not on the writings of yet another South Sea traveler.

In the first book of his *Herbal*, Rumphius included a detailed description of the breadfruit tree. He distinguished three different varieties, the

seedless breadfruit called katoen soccus-boom (cotton soccus tree), a seeded version he named korl sockam-boom (seeded soccun tree), and the wilde soccun-boom (wild soccun tree). In each instance he thoroughly described the plant, its habitat, and its uses and provided an illustration. And while Rumphius's depictions of the plant's physiognomy closely resembled the descriptions emerging from the Dampier, Anson, and Cook expeditions, his assessment of the plant's nutritional value differed markedly. Fruits from the wild breadfruit tree, Rumphius reported, contained "many kernels in a slimy marrow" (357). Even when roasted, the seeds tasted so bitter that they were barely edible and, when consumed, "bind[ed] and bloat[ed] very badly," causing severe indigestion (357). Appropriately, they were only consumed when nothing else was available, "by the common people in times of famine" (357). The inhabitants of Ambon therefore preferred the tree's cultivated variations, and especially the seeded breadfruit tree, which grew quickly and, sown in dedicated plots in the midst of settlements, provided food as well as shelter against the heat and the sun (355). Again, Rumphius describes breadfruit as a food for "common people," prepared by roasting the seeds or, less frequently, by boiling the flesh into a mush (356, 352). Just like the wild soccun, however, the processed product of the seeded soccun tree proved hard to digest and "unfit for tender folks" (356). Even the seedless breadfruit tree variation, which was most highly rated by the English explorers and botanists, was rather unappetizing. Rumphius described the flesh of the seedless cotton soccus breadfruit variation as somewhat dry and "wooly or hairy . . . , resembling tufts of sheepwood" (351). It could not be eaten raw, and even when baked in the Ambonese manner was far from delicious (353). It was best, Rumphius emphasized, when "cook[ed] or steam[ed] . . . in a meat broth, the way we do with cabbage" (351). Infused with the flavor of the broth, it would "then taste almost like artichokes" (351). Consumed in moderation, this kind of breadfruit could be "healthy for those with a weak stomach, for it will moderately bind," but overall, the plant served as a mediocre food source at best. It "provides a solid and substantial food, which will *almost* satisfy one's hunger," Rumphius concluded, "wherefore it is most fitting for working people" (353; emphasis added).

Though a questionable food source, the breadfruit tree, Rumphius demonstrated, was useful in many other ways. Its wood was sometimes used for carpentry (353, 356), although its light and spongy texture made it

especially suitable for the making of decorative boxes and tifa drums (353). The tree's twigs and branches were repurposed as "slow matches" (356) and snake repellent (357), its big sturdy leaves served as tablecloths, plates, and napkins (356), and breadfruit milk was used to trap birds or as a kind of cement to make things watertight (353). But most importantly, the breadfruit tree possessed critical medicinal qualities. Remedies made out of breadfruit products cured skin afflictions (353), diarrhea (353), and dysentery (357) and helped women in childbirth (353). For Rumphius, then, the breadfruit tree was an important resource not because of the plant's nutritional value, but because of the many other uses that could be gained from it.

In his *Description of the Mangostan and the Bread-fruit*, however, John Ellis cast the breadfruit as an "ideal article of food," important to "all ranks of . . . inhabitants" in "our West India islands," but especially well suited "to the Negroes" (11). To provide evidence for his claim, Ellis cited Rumphius's entry on the seedless cotton soccus tree, but modified it in two critical places: breadfruit, Ellis's version of Rumphius's text said, "affords a great deal of nourishment, and is very satisfying, therefore proper for hard-working people" (13). Consulting the Dutch-Latin original, however, as noted earlier, shows how Rumphius had only spoken of "a solid and substantial food, which [would] *almost* satisfy one's hunger." Moreover, his breadfruit was best suited for "working people" not, as Ellis had noted, for "hard-working people." Although small, Ellis's modifications here are important. Breadfruit was not quite as nourishing as he had made it out to be, and he had a different consumer in mind: The "hard-working people" Ellis wanted to feed were, as he wrote, "the Negroes" of "our West India islands." The "working people" Rumphius referred to were likely members of Ambon's indigenous population, "common folk" as he called them elsewhere (356), and not enslaved people, who in his *Kruid-Boek*, he called "slaven" in Dutch and "servi" in Latin (e.g. 19, 22, 117, 186).

Studying the original British and Dutch breadfruit accounts alongside Ellis's modified version reveals that Ellis deliberately manipulated his evidence in order to help his Royal Society associate Joseph Banks gain the support of the British Admiralty and the general public for his transoceanic transplantation scheme. In his *Herbal*, Rumphius had initially portrayed the breadfruit tree as a multiuse resource with questionable nutritional qualities. But as they searched for something to replace the foodstuffs no

longer arriving from North America, British officials used the Dutch naturalist's work to cement the breadfruit's status as an eighteenth-century superfood naturally well suited to feeding captive workers. This understanding of breadfruit as first and foremost food for slaves, an understanding that provided the ideological underpinning for the transplantation of the breadfruit to the Caribbean, emerged at least in part from Ellis's motivated mistranslation.

Written in 1775 and 1777, respectively, Ellis's pamphlet and Walker's essay advance a utilitarian and colonialist agenda that frames the Pacific world and its seemingly infinite botanical resources as at once the backdrop to and supplier for an Atlantic world economy based on slave labor. Walker's material conception of translation as transplantation and Ellis's understanding of translation as manipulation helped Joseph Banks to bring the breadfruit tree to the British West Indies. In 1787, he commissioned William Bligh to sail to Tahiti in order to collect "as many . . . [breadfruit] trees as . . . can be taken on board" (qtd. in Frost 48). This voyage famously ended in mutiny, but in 1791, Banks sent Bligh out again, on a breadfruit voyage that was more than twice the scale of the first.¹⁴ This time, Bligh succeeded, and the precious plant adapted well to its new environment. The tree thrived in St. Vincent, Barbados, and Jamaica and, according to the director of the St. Vincent botanical garden, grew "better than in its native soil" (qtd. in Tudor 63). Local planters began to cultivate breadfruit from the cuttings they received from the botanical gardens, but the plant failed to meet the high expectations Banks and others had put into it. Enslaved people refused to eat breadfruit, preferring plantains and yams that they could grow themselves. Soon observers also began to notice the harmful environmental effects of breadfruit cultivation. "[T]his BULLYING STRANGER," the *Jamaica Magazine* charged, is "injurious to plantain trees growing under [its] shade" and causes "impoverishment of the soil in [its] immediate neighbourhood" ("Reply" 140).¹⁵

Yet despite these problems, the Pacific newcomer rapidly spread across the Caribbean and to the North and South American continents.¹⁶ At the end of the eighteenth century, it appeared in the United States, where it was reconfigured not as food for slaves, but as a democratic crop suitable for all Americans. Going back to a broader conception of the plant as a potential dietary staple for all, Americans devised a rhetoric of substitution and

subsistence that was squarely rooted in the social and material realities of the early Republic.

Newspapers in the United States had reported widely on Banks's breadfruit transplantation scheme, praising the botanist's vision and "scientific skill" ("Botany and Gardening"). American periodicals rarely mentioned the plant's intended use as food for slaves, but rather described the fruit as "a sacred trust deposited for public benefit" ("Extract") and a "resource [that] might be eminently useful in times of scarcity (Untitled notice, *Balance*). Indeed, the British emphasis on breadfruit as a cheap source of food made the plant attractive to a new nation on the brink of famine. During the American Revolution and the early days of the Republic, wheat had acquired an enormous material and symbolic value. Boycotted and embargoed by the British government at the onset of the American struggle for independence, the continent's abundance of wheat and the diligence of the American farmer now ensured that the new nation could be self-sufficient and healthy, economically and spiritually independent from the corrupting influence of the British monarchy.¹⁷ But between 1787 and 1804, a small insect destroyed the wheat supplies of the United States, threatening American economic self-sufficiency and leaving thousands without food. Descending upon wheat fields from upper New York to Virginia, the Hessian fly created "a calamity more to be dreaded than the ravages of war" and sent the US government into a frantic search for a food staple that could replace the blighted grain ("On the Hessian Fly"). Grain shortages and famine had just caused unrest in England and France, and American government officials knew that the question of how to feed the American population was crucial for the survival of the young Republic (Pauly 33–50; Hunter).¹⁸

The breadfruit's reputation as a hyperproductive, low-cost, low-maintenance food source made this recent transplant to the West Indies an intriguing possibility. In newspapers and in the correspondence of politicians, breadfruit emerged not only as a possible substitute for wheat but as a superior alternative. Its supposed nutritious qualities and abundant growth made the plant the perfect food staple for the entire population of the new nation, feeding not only enslaved people but all Americans. The *Balance and Columbian Repository* of Hudson, New York, for example, advised the plant's introduction to "the warm climates in our Southern States" and instructed its readers on how to make the best use of the plant

once they had obtained it: “It has been found, that by the process of drying the fruit, and reducing it to powder,” the article writer explained, “a species of flour may be produced which will make breadfruit [flour] distinguishable from that of wheat [flour] only by the superiority of its flavour” (Untitled notice, *Balance*). The idea of producing breadfruit flour as an analogue to wheat or corn flour had not appeared in any of the British, Dutch, or Spanish writings on the plant. As they were facing a possible hunger crisis, Americans, it seemed, were willing to transform the exotic East Indian fruit in a way that made its absorption into the American diet as seamless as possible.

In order to finally obtain breadfruit seedlings Thomas Jefferson, then minister plenipotentiary to France, wrote to the Royal Society in London. Laying out the destruction caused by the wheat fly, Jefferson inquired whether “any of our climates [in the United States would] admit the cultivation of the [Bread tree]” (“From Thomas Jefferson to Benjamin Vaughn”). In 1795, President George Washington sent a special emissary to Jamaica with the mission of procuring this useful plant. The Jamaican House of Assembly readily complied with Washington’s request and sent a living specimen to Philadelphia, but dampened Washington’s hopes that breadfruit could supplant the blighted wheat as the United States’ most important crop. “If it will thrive in the Southern parts of America,” the assembly representative wrote, “it will be a great Acquisition, but I doubt it; it is however well worth the Tryal” (“To George Washington”). Indeed, the Jamaican plant specimen did not even survive the journey to the United States, and the American government temporarily abandoned its attempts to introduce breadfruit as a dietary staple for the population of the young Republic.

In 1797, however, the plant resurfaced in a curious incident of botanical diplomacy. Alexandre Giroud, a commissioner for the French government in Saint-Domingue, reached out to Thomas Jefferson, now vice president of the United States, and sent him, unprompted, several seeds of the breadfruit tree.¹⁹ In the accompanying letter, Giroud expressed his hopes that this “precious plant,” which thrived on Saint-Domingue, might also prosper “in the Southern States of your Republic.” Admiringly addressing Jefferson as “citizen” and “Philosopher and Republican of Monticello,” Giroud described how he envisioned that in ten years, all visitors to Monticello would be greeted by beautiful breadfruit groves and generously offered to

send “more shipments of breadfruit seeds and other precious plants from the Indies” (“To Thomas Jefferson from Alexandre Giroud,” my translation). Giroud could very well be generous in his offerings of breadfruit because the plant had lost its value in Saint-Domingue with the abolition of slavery in the French colonies in 1794. The plant was still a highly sought-after commodity in other plantation societies, however, leading Giroud to use breadfruit to sustain the diplomatic and commercial alliances between the French colonies in the Caribbean and the United States.

Jefferson enthusiastically responded to Giroud’s offering. Acknowledging the gift of breadfruit seeds, he told Giroud: “One service of this kind rendered to a nation is worth more to them than all the victories of the most splendid pages of their history” (qtd. in Iannini 249). On the same day as he composed his letter to Giroud, Jefferson personally oversaw the distribution of the seeds to planters in Georgia, South Carolina, North Carolina, and Virginia (“From Thomas Jefferson to Alexandre Giroud”; “From Thomas Jefferson to Allen Jones”). The president of the Agricultural Society, a planter from Charleston, also received his share of seeds and promised that “the greatest Attention will be paid to the raising [of] this Fruit.” He reasoned, “Every Measure that can . . . add additional Blessings to the many our Country already enjoys ought to be Attended to” (“To Thomas Jefferson from Thomas Bee”).

By the beginning of the nineteenth century, then, the British rhetoric of breadfruit as not simply a foodstuff but a crop especially well suited to feeding slaves had seeped into the United States, via Saint-Domingue, and circulated across the South. In language that recalled Ellis’s breadfruit propaganda pamphlet, the Charleston *City Gazette* sang the praises of the plant. “As an ornamental tree it is described as beautiful to the eye—as an oeconomical one [sic], its fruit is abundant, of most nutritious [sic] qualities, and pleasant to the taste,” the newspaper reported, and concluded that “[t]he Southern or Sea-board of our State would probably afford it a congenial soil” (“Bread-fruit Tree”). In 1822 the merchant and politician Samuel Maverick maintained that he thought the plant would be especially valuable “to those people who will indure the Long tedious warm Summers of Alabama, [where] Cotton grows so Luxuriantly” (“To Thomas Jefferson from Samuel Maverick”), whereas the *Richmond Enquirer* propagated its cultivation “on the sea coast of South Carolina” (Untitled notice). Newspapers across the South reported on the breadfruit’s “uses and virtues” (“Curious

Trees”), publications devoted to agriculture dedicated entire chapters to tending to its seeds (“Ruffin’s Farmer’s Register”), and the offices of the *Charleston Gazette* exhibited breadfruit seeds “for the inspection of the curious” (“Bread-fruit Tree”). In the years after the breadfruit seed transfer from Saint-Domingue to the United States, articles in northern and southern newspapers often carried references to the plant’s abundant growth in British Jamaica, French Cayenne, Spanish Cuba, and Dutch Suriname.²⁰

Giroud’s gift of breadfruit, Jefferson’s efforts to introduce the plant in the southern United States, and the newspapers’ reminders of the plant’s centrality in the plantation economy of the British, French, Spanish, and Dutch Empires confirmed the United States’ alliance with the slave societies of the American hemisphere. Through its transoceanic transplantation from the East Indies to the West Indies, linguistic (mis)translation from Dutch to English, and diplomatic transfer from Saint-Domingue to the United States, breadfruit was transformed from a resource for Pacific indigenous communities into a food for captive Africans and their descendants in the Atlantic world. Having overcome the wheat blight and the political, social, and economic insecurities that accompanied the independence of the United States from the British Crown, Americans could now self-consciously co-opt British positions if they thought they benefited their own country. Once on the periphery of the British Empire, the United States had found its place in the world: it had become at once an ally and an opponent to the old European empires, and a nation that was deeply implicated within a multilingual, transoceanic plantation economy. By connecting the South Pacific with the Caribbean and the United States, a transoceanic approach allows us to see that the British Empire’s participation in the Atlantic slave trade ultimately informed the British government’s actions in the Pacific, and that the United States, even in its infancy, was more than a marginal player in eighteenth- and early nineteenth-century world affairs.

The breadfruit’s circuitous path from Tahiti to the United States, via the Caribbean, mirrors the long and unpredictable journey of the plant’s descriptions. Accounts of the breadfruit tree popped up in English expedition narratives, Dutch natural histories, and American newspaper articles, bearing testimony, in each instance, to the material and cultural circumstances of their production. But it is only when we compare these accounts

across languages and with indigenous sources that we can begin to understand the true, unpalatable history of the breadfruit tree. The discrepancies and similarities emerging from such multilingual comparisons draw our attention to how these accounts were edited, altered, and manipulated to support specific political agendas. Tracing the transoceanic journey of the breadfruit tree reveals how the politics of translation, as both a botanical experiment and a linguistic exercise, impacted scientific practice and the circulation of knowledge, inflecting conceptions of nature and natural history.

NOTES

1. A small number of scholars have insightfully commented on the breadfruit and its appropriation as a food for enslaved people. The works of Mackay, Smith, DeLoughrey, Fulford, Bewell, and Newell were especially helpful as I was thinking through this essay.
2. Mackay has called the British pursuit of breadfruit “a collective national madness” (123); DeLoughrey refers to it as “mania” (n. pag.). In France, Voltaire idealized the plant as one that could “serve to nourish and satisfy the hunger of humankind” (“serviraient à nourrir & à désaltérer le genre humain”) (104). Observing the British breadfruit transplantation efforts, the French government also planned the introduction of the plant in its slaveholding Caribbean colonies and in Mauritius. Even more, the French government envisioned the tree’s naturalization in the metropole, hoping to compensate for food shortages incurred during and after the French Revolution (Spary 128–32). Sustained efforts to introduce breadfruit in the Americas began in the 1770s and lasted until the 1820s.
3. See, for example, Stockhorst. For the role of translation in early modern science and culture, see Fransen, Hodson, and Enenkel; Burke and Po-chia Hsia; and Newman and Tylus.
4. For works expressing similar sentiments, see Fransen 5–6; Dietz 117; and Pantin 163. For scholarship that brings together natural history and translation studies, see the works cited in n. 3 and previous sentence of this note and Bigelow; Dupré; and Gordin.
5. The original expedition record, published in 1613, read:

Los arboles, que se apuntò estauan en la plaça, dauan cierta fruta que llega a ser como la cabeça de un muchacho, cuyo color quando está madura, es verde claro, y verdissima quando acerba. Señala la cascara unas rayas cruzadas al modo de piña. No es su forma del todo redonda, es algo mas angosta en la punta que en el pie. Deste nace un peçon que llega hasta el medio della, y del

peçon una armadura de telas. No tiene huesto, ni pepita, ni cosa sin prouecho, fuera de la cascara, y essa es delgada, el resto es una masa de poco çumo quando madura, y quando verde, de menos. Comieronse muchas de todas maneras. Es tan sabrosa que la llamauan manjar blanco. Tuuose por sana, y de mucha sustancia. Las ojas de su arbol son grandes, y muy arpadas amanaera de las Papayas. (Suárez de Figueroa 246)

The translations of this excerpt are my own.

6. Breadfruit cultivation was not as effortless as Banks suggested, though not nearly as labor intensive as wheat and other crops cultivated in Europe. Articles by Smith and Fulford have explored the plant's symbolic value as bread substitute and Edenic manna for Tahitian "noble savages."
7. For more on the life and career of Joseph Banks, see Gascoigne, *Banks and the English Enlightenment*, "Banks, Sir Joseph," and *Science*; and Drayton 94–106.
8. For more on the connection between American independence and the West Indian food crisis, see Mackay 126–28; Drayton 79, 106–15; Newell 146–50; and DeLoughrey. All of these sources point out that the planters' fear of famine was wildly exaggerated.
9. For more on colonial bioprospecting and the relationship between science and empire in the eighteenth century, see for example, Pratt; Drayton; Schiebinger; Schiebinger and Swan; Batsaki, Cahalan, and Tchikine; Casid; B. Tobin; Barrera-Osorio; Bleichmar; McClellan; Spary; and the works of Gascoigne cited in n. 7.
10. For fear of lessening the colonies' dependence on the metropole, an article in the *Mercure de France* strongly advised the French government against pursuing similar transplantation schemes, to no avail. The French government continued to pursue transoceanic botanical transplantations (Spary 128–32). See "Avis aux Nations."
11. I have been unable to uncover more biographical information on Walker. The title page of his essay states that it was prepared by "Dr. Walker of Moffat for use of Lord Bute," who in turn forwarded it to Joseph Banks. Bewell attributes the essay to Rev. John Walker, who in 1779 became the first Regius Professor of Natural History at the University of Edinburgh (104).
12. For more on John Ellis, see Groner; Rauschenberg; and Murphy.
13. Other works by Rumphius include *D'Amboinsche Rariteitkamer* (*The Ambonese Curiosity Cabinet*, 1705), *De Amboinese Historie* (*The History of Ambon*, 1678), and *De generale land-beschrijving van het Ambonsche gouvernement* (*General Geography of the Ambonese Government*, n.d.). Valentini's *Museum Museumorum* (1704) includes six botanical sketches and fourteen letters by Rumphius. Valentini's *Oost-Indianische Send-Schreiben* (1704) also contains six botanical descriptions and twelve letters. For a full bibliography of Rumphius's writings, see Beekman, Introduction, Rumphius, *Ambonese Herbal*, 88–94. For secondary literature on Rumphius, see, e.g., Leuker, "Knowledge Transfer" and "Wissenstransfer"; Arens, "Local Material" and "Plants and Books"; and Baas and Veldkamp.

14. For more on the mutiny, see, e.g., Dening and Alexander.
15. For more on the plant's introduction to the West Indies and its effects on the local populations and ecosystems, see Newell 166–70; Tudor 62–65; and DeLoughrey.
16. Newspaper reports testify to the presence of the breadfruit tree in Saint-Domingue, Cuba, and Suriname. See, e.g., “Du Port-au-Prince”; “Bread-fruit Tree”; Untitled notice, *Balance*; and Untitled, *Richmond*. In 1828 *Curtis's Botanical Magazine* marveled at the wide geographic distribution of the breadfruit tree:

[I]n St. Vincent's, under the judicious management of Dr. ANDERSON, then director of the Botanic Garden, the *Bread Fruit Tree* began to bear [in] 1794; and it has thence been communicated to the other islands, and to the colonies of equinoctial America. . . . The Bread Fruit is now known from Spanish Guiana to the kingdom of New Granada: thus, as HUMBOLDT states the curious fact, the western coast of America, washed by the Pacific Ocean, receives from a British settlement in the West Indies, a production of the Friendly Islands. (“*Artocarpus Incisa*” n. pag.)
17. For more on the political symbolism of wheat, see Hunter and Breen 180–86, 205–06. For more on the importance of agriculture in the early Republic, see Pauly; Sturges; and Sweet 97–121.
18. For more on grain shortages in England, see Smith 58–59; for France, see Petersen.
19. For more on the botanical diplomacy between Giroud and Jefferson, see Iannini 219–51.
20. See, for example, Leeson; “Bread-fruit Tree”; and Untitled notice, *Balance*.

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