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A Protestant or Catholic Atlantic World? Confessional Divisions and the Writing of Natural History

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Monarchs, corporations and individuals, who sponsored voyages of exploration and discovery into parts of the world of which Europeans previously knew little, understandably strove to monopolise whatever knowledge of places, peoples and resources accrued from the high-risk investments they had made. In practice, however, whatever new information was uncovered concerning oceans, travel routes, continents, islands, local populations and resources quickly seeped out, not least because, as David Abulafia has emphasised, all crews in these early voyages were multinational, and sailors regularly returned to their home ports gushing with news of fresh discoveries.[1] Moreover, whenever any society gained an exploratory advantage, rival governments indulged in talent poaching seeking to induce people with privileged knowledge to transfer to the educational, promotional, and scientific institutions or positions that governments fostered in imitation of those that had contributed to the success of competitors. The prime example is that of Spain seeking to emulate Portugal in navigation and exploration.[2] However, such competition never

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[1] David Abulafia, *Atlantic Encounters in the Age of Columbus* (New Haven, CT, 2008).

[2] Edward Collins, 'Portuguese contributions to the knowledge and practice of nautical science in the *Casa de la Contratacion* in Spain, 1500–1580', Ph.D. thesis, National University of Ireland, Galway, 2010; Alison Sandman, 'Controlling knowledge: navigation, cartography, and secrecy

ceased, and at the end of the sixteenth century we find Richard Hakluyt soliciting to have a 'Lecture of Navigation read in this City [London] for the banishing of our former gross ignorance in Marine causes, and for the increase and general multiplying of the sea-knowledge in this age'. He cited the Emperor Charles V:

> [who] with an high reach and foresight, established not only a Pilot Major, for the examination of such as sought to take charge of ships in that voyage, but also founded a notable lecture of the Art of Navigation, which is read to this day in the Contraction house of Seville. The readers of which lecture have not only carefully taught and instructed the Spanish mariners …, but also have published sundry exact and worthy treatises concerning Marine causes, for the direction and encouragement of posterity.[3]

Here Hakluyt was acknowledging that geographic information was also being broadcast by two fresh, but interconnected, print genres: books and atlases correcting and updating received wisdom; and texts on the natural history of the world beyond Europe. These latter sought to reconcile whatever new discoveries came to light with what both the scriptures and the ancients—particularly Pliny and Aristotle—had had to say about the human habitation of the globe and the resources with which God had endowed the earth.[4] Knowledge was further disseminated by the composite publications of travel narrators, including Giovanni Battista Ramusio, André Thevet, Richard Hakluyt, John Huygen van Linschoten, and Samuel Purchas, who compiled and published details of the explorations undertaken, and the discoveries made, by travellers in every century. The advancement of geographical knowledge by competition-through-imitation, that Hakluyt both advocated and enabled, persisted for centuries, and was furthered by such bodies as the French Academy, established in 1666, and the Observatory, founded in 1667, and by analogous foundations in other countries including the Royal Society of London.

Such progression suggests that governments, corporations and individuals who had invested in exploratory ventures experienced difficulty in claiming intellectual proprietorship over scientific discoveries. However, it appears that some sought to rechannel the spluttering flow of information

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in the Early Modern Spanish Atlantic World', in James Delabourgo and Nicholas Dew (eds.), *Science and Empire in the Atlantic World* (New York and London, 2008), pp. 31–50.

[3] Richard Hakluyt, *The Principal Navigations, Voyages and Discoveries of the English Nation* (Glasgow, 1903), vol. I, Introduction, pp. xxxiv–xxxxv.

[4] For an outstanding study of the interaction between classical knowledge, received wisdom and practical experience in the Americas, see Sabine MacCormack, *On the Wings of Time: Rome, the Incas, Spain, and Peru* (Princeton, NJ, 2007).

that had been available up to the mid-point of the sixteenth century as the race for the acquisition and exploitation of overseas territories became as much a competition between religious denominations over souls to be saved as a contest between states for resources to be exploited. The confessional edge to which I allude became increasingly evident in all European discourse relating to transoceanic affairs at the point when King Philip II of Spain came to be perceived as a threat to Protestantism everywhere in Northern Europe and particularly in the Low Countries, England and France. While Spain was berated for its tyranny in seeking to suppress Protestantism in the Low Countries, critics also contended that the military might of Spain was disproportionate to its resources, and could only be accounted for by the access it had gained to precious metals after their overthrow of the great civilisations of Mexico and Peru. Critics of Spain believed that this unfair advantage could be redressed only when Protestant powers emulated Spain, and when Protestant sailors, with or without the support of their governments, engaged in attacks upon Spanish treasure fleets and upon the strategic positions that were important to Spain's acquisition and transportation of precious metal. Representation of Spanish cruelty in the Low Countries was now regularly augmented by reference to the treatment meted out by Spanish *conquistadores* to the native populations of the Americas. Then, as a further justification for the hostile actions they planned to unleash, Protestants prepared translations of the critique of Spanish maltreatment of the native American population, especially in the West Indies, that had been composed by Fray Bartolomé de Las Casas, whose work was now cited, as it was by Sir Walter Raleigh in 1591, to show 'how irreligiously they cover their greed and ambitious pretences with that veil of piety'.[5]

According to this Protestant reasoning, any attack upon Spain in America or on the high seas would contribute to weakening Spain in Europe, to liberating Native Americans from their oppressors, and to offering them the solace of true religion. This legitimised a maritime assault, led by Dutch, French and English Protestant groups, upon Spanish interests in the Atlantic, and also some efforts to establish settlements in the Americas in defiance of Papal pronouncements and Iberian aggression. What is not always appreciated is that this hostility and conflict resulted also in a tightening of the channels of scientific discourse

[5]The quotation comes from the 1591 account by Raleigh of the last fight of the *Revenge,* in Richard Hakluyt, *The Principal Navigations*, vol. 7, p. 51; the Las Casas text to which the Protestant authors persistently referred was *Brevissima relación de la destruyción de las Indias* (1552).

that had remained remarkably porous despite the efforts of governments to privilege information. I suggest that in these changing circumstances, those who broadcast information on the Atlantic World sought increasingly to identify whatever progress they were recording as the achievement of one confessional rather than one national group. Thereafter, while efforts to establish colonies could still be multinational they became denominationally exclusive. As this happened, colonial discourse—particularly that concerned with the natural history of the Atlantic world—became correspondingly entangled with religious polemic. This can be witnessed in the texts and illustrations associated with three sixteenth-century attempts to establish colonies in the Americas against Iberian wishes.

The first was an endeavour of 1555–8, led by a French nobleman Nicolas Durand, chevalier de Villegagnon, to establish a French colony in Brazil, close to present-day Rio de Janeiro. This effort was twice reported upon officially by André Thevet, a Franciscan priest and royal cosmographer who had been appointed as *aumonier*, or chaplain, to the expedition.[6] Then, in 1578, Jean de Léry composed an uninvited narration and interpretation of what had transpired in Brazil twenty years previously. De Léry was one of a group of Protestants who had joined Villegagnon in the colony in March 1557; by the time he wrote of the events he had become a Huguenot pastor and propagandist.[7]

The second effort, also French , but enjoying some English and Dutch Protestant support, was led by René Goulaine de Laudonnière. It aimed to establish a colony in Florida in 1564–5, on a site identified in 1562 by Jean and Jacques Ribault, father and son. Laudonnière wrote an account of his effort at colonisation,[8] as did another participant, Jacques le Moyne de Morgues. The latter, being an artist, also made engravings to depict the principal actions, and composed commentaries to accompany his illustrations.[9] The drawings and commentaries were reproduced in the second part of Theodore de Bry's *America* published in Frankfurt in 1591.

[6] André Thevet, *Les singularitez de la France antartique* (Paris, 1558), ed. Frank Lestringant (Paris, 1997); André Thevet, *La cosmographie universelle d' André Thevet* (Paris, 1575); for a modern edition of de Bry see Theodore de Bry, *America. Pars 1–3*, *Le théâtre du Nouveau Monde: les grands voyages de Théodore de Bry*, ed. Marc Bouyer and Jean-Pierre Duviols (Paris, 1992).

[7] Jean de Léry, *Histoire d'un voyage faict en la terre du Brésil* (Geneva, 1578, 2nd edn., 1580) ed. Frank Lestringant (Paris, 1994).

[8] René Guilaine de Laudonnière, *L'histoire notable de la Florida* (Paris, 1586); Richard Hakluyt catalogued several documents relating to the Florida expeditions, including his translation of the above, in Richard Hakluyt, *The Principal Navigations*, vol. 8, pp. 423–86 and vol. 9, pp . 1–100.

[9] Paul Hulton (ed.), *The Work of Jacques le Moyne de Morgues: a Huguenot Artist in France, Florida and England*, 2 vols. (London, 1977).

The third effort at colonisation was that of 1585–7 on Roanoke Island, off the North Carolina coast, sponsored by Sir Walter Raleigh. The scientist Thomas Harriot who was recruited by Raleigh wrote of it in *A Brief and True Report of the new found land of Virginia*. A visual record of this attempt was taken, under Harriot's direction, by the limner John White, some of whose drawings were later used for the copper engravings that embellished the reprint of Harriot's *Brief and True Report* published in de Bry's *America*. The de Bry text has therefore also to be considered both a product of, and a major contribution to, the consciously Protestant evangelical/scientific approach to the writing of the natural history of the Atlantic World.[10]

One can almost measure a steady rise in confessional temperatures in the three scientific texts concerning the French attempt to establish a colony in Brazil between 1555 and 1558. The original purpose of this venture was to increase the wealth of France by having French people exploit the resources of a region that, by Papal decree, had previously been a Portuguese preserve. The enrichment of France seemed attainable because, to cite from Thevet's first narration, those things that were most precious and excellent in nature still lay hidden in a region inhabited by an exotic and savage people who lived like unreasonable beasts *sans foy, sans loy, sans religion, sans civilité*.[11] King Henry II had assigned Villegagnon—a nobleman, a Knight of Malta and Vice-Admiral of Brittany—to be its leader, and his choice of André Thevet to be chaplain to the expedition was also unsurprising given that he was the royal cosmographer who, in 1554, had published his *Cosmographie de Levant*.[12] Villegagnon, like the king and many of the French nobility of the time, believed that an accommodation between Catholics and Protestants was still possible, and, since he had known Jean Calvin at university in Paris, he was able to call on him, and also on Admiral de Coligny, to have Calvinists join in the expedition. They, in turn, welcomed the opportunity to have a Calvinist community serve their king and country in *la France Antartique*.

[10] Thomas Harriot, *A Brief and True Report of the new found land of Virginia* (London, 1588); de Bry's reproduction of the English language version of this text, published 1590 in the first part on de Bry's *America*, together with his rendition of White's drawings, are copied in Paul Hulton, *America 1585: the Complete Drawings of John White* (Chapel Hill, NC, and London, 1984), pp. 103–206; see also Paul Hulton and D. B. Quinn (eds.), *The American Drawings of John White, 1577–90* (Chapel Hill, NC, and London, 1964); the most recent appraisal of the Roanoke expedition are Karen O. Kupperman, *Roanoke: the Abandoned Colony*, 2nd edn. (Lanham, NJ, 2007) and D. B. Quinn, *Set Fair for Roanoke, Voyages and Colonies, 1584–1606* (Chapel Hill, NC, 1984).

[11] Thevet, *Les singularitez*, sig. 51v.

[12] André Thevet, *Cosmographie de Levant* (Paris, 1554), ed. Frank Lestringant (Geneva, 1985).

It is unlikely that Thevet, a Franciscan priest, would have been as sanguine about a Calvinist presence as was Villegagnon, but he did not have to grapple unduly with his conscience given that he arrived in Brazil on 10 November 1555, became ill soon thereafter, and took ship back to France in January 1556 after but ten weeks on location. Once home, and while the venture was ongoing, he composed *Les singularitez de la France Antartique*, which was published in 1558. The king's ship on which Thevet had voyaged home was back in Brazil on 7 March 1557, this time with fourteen Protestants who had travelled from Geneva to Dieppe and sailed to the colony. These included the shoemaker, later pastor, Jean de Léry.

Therefore while Thevet and de Léry were to write on the same subject they were not personally acquainted, had not been present in Brazil at the same time, and were to arrive at different conclusions concerning the project. Thevet emphasised the importance of eyewitness evidence to lend credibility to descriptions of the way of life of exotic peoples. However he, like several Spanish ethnographers, whose work culminated in 1590 in *Historia Natural y Moral de las Indias* by the Jesuit José de Acosta, had an elastic view of what constituted eyewitness testimony. Essentially he, and they, accepted that evidence vouched for by reliable third-party witnesses was as authoritative as what authors had seen with their own eyes.[13] However Thevet broke with convention by not identifying what of his testimony came from others, and he exposed himself to ridicule because he included in his narrative reports of conversations with Native American leaders that could never have taken place, and appraisals of native societies in parts of America that he could not possibly have visited.

If Thevet's casualness would be used later by Protestants to discredit him, his authority as 'cosmographer to four kings' remained undiminished in Catholic France. This trust was not entirely misplaced given that some twentieth-century archaeologists and ethnographers have demonstrated scientifically that some of Thevet's depictions of Native American artefacts and cultural practices that he could not have witnessed were accurate. Such precision was due to his shrewd choice of informants—we know, for example, that he learned of French Canada from Jacques Cartier. His misfortune was that he was sometimes credulous, as in

[13] José de Acosta, *Historia Natural y Moral de las Indias* (Madrid, 1590); I have used José de Acosta, *Natural and Moral History of the Indies*, ed. Jane E. Mangan, trans. Frances M. López-Morillas (Durham, NC, 2002); almost everything that de Acosta had to say of Mexico came to him from witnesses whom he considered reliable.

presuming the existence of, and then describing and depicting, the purely mythological Amazons.[14]

Les singularitez de la France Antartique began with a narration of the voyage to Brazil and the effort by Villegagnon to fortify an island that would be safe from possible Portuguese attack and provide a platform from which the French might interact with the native population, primarily for purposes of trade. Then, with the aid of illustrations, presumably executed after the event by engravers in Europe, Thevet offered an ethnographic appraisal of the society of the Tupinamba together with exact descriptions of some animals and plants of Brazil. Then, to round off his narrative, Thevet supplied a largely fictive rendition of his return journey to France which included descriptions of indigenous societies in Mexico, Florida and Canada all of which he could not have witnessed.[15] This was analogous to his account of the outward journey where, as well as discussing society in the Canaries and Madeira, he expounded on the lives of peoples in Ethiopia, Guinea, the Cape of Good Hope, and Madagascar.[16]

Thevet considered the Tupinamba a primitive people who lived comfortably because God had endowed their land with fruits, vegetables, and fish and also with secrets of nature that they were not expert to discover or exploit.[17] To him, they seemed more brutish than the populations of India and Africa first because, while they believed in God as a giver of roots, they did not know how to worship him, and second because they lacked any sense of shame in their nakedness, unlike the people close to the Ganges who, as Thevet had learnt from Pliny, covered their private parts with leaves.[18] Thevet concluded that what the Tupinamba knew of God came from natural instinct and he found that they had responded positively whenever he told them of a creator.[19] Moreover, for Thevet, the Tupinamba's abhorrence of consanguinity proved that they possessed a concept of marriage; an institution that, for him, distinguished humans from beasts.[20]

[14] Those who have done most to rehabilitate Thevet's reputation are the archaeologist William F. Ganong in the 1930s and the ethnographic historian Olive Dickason in the 1970s; see more generally the introduction to Roger Schlesinger (ed.), *Portraits from the Age of Exploration* (Urbana, IL,1993); as it transpired Walter Raleigh also wrote in the belief that Amazons really existed; see Walter Raleigh, *The Discovery of Guiana, 1595 and Related Documents*, ed., Benjamin Schmidt (Boston, MA, 2008).

[15] Thevet, *Les singularitez*, chaps. 73–82.

[16] Ibid., chaps. 1–23.

[17] Ibid., chaps. 25–6.

[18] Ibid., chap. 29.

[19] Ibid., sig. 52r.

[20] Ibid., chap. 42.

As he described the lives of the Tupinamba Indians, Thevet balanced what he admired against what he abhorred, and what he found curious against what he considered reprehensible. In battle he found them *fort et ferme* and was impressed by their use of music to celebrate their victories.[21] However he was appalled by, and described in pictures, their practice of capturing enemies with a view to clubbing them to death and grilling and eating their flesh.[22] On the other hand he was touched by the hospitality shown by the Tupinamba towards people other than their foes, and he was fascinated by their practice of having young women weep to show that visitors were welcome to their homes.[23] However he decried their practice of offering young women to strangers for their sexual gratification, and he considered the resultant venereal disease that had spread even to Europe as a just recompense for debauchery; therefore he commended Villegagnon

Figure 1. Thevet's portrayal of a captured enemy being prepared for execution.

[21] Thevet, *Les singularitez*, chaps. 38–39, illustrations, sig. 76v, 77r.
[22] Ibid., chap. 40, illustrations, sig. 76v, 77r.
[23] Ibid., chap. 40, illustrations, sig. 85, v.

for prohibiting the men under his command from consorting with native women.[24] Thevet admired the Tupinamba for eating and drinking in silence and for distinguishing between eating and drinking, but he was disgusted by their manner of extracting alcohol from an otherwise poisonous root by having women chew upon it to extract and spit out the poison before boiling that which was beneficial for subsequent consumption.[25] Ultimately, Thevet was portraying a people who he considered not only barbarians but slaves to Satan which, for him, was proven by the importance they conceded to prophets and magicians, by their burial practices, and by their terror of visions, dreams and delusions.[26]

Thevet's primary purposes were first to explain the potential economic benefits that would accrue to France if the French had the opportunity to exploit the natural resources of *la France Antartique*, and second to encourage French missionaries to preach the Gospel there. However he was also arousing the curiosity of readers concerning exotic places and he used illustrations so that his public would not only read but *voir et gouster quelque belle histoire*.[27] He considered his account definitive and he resumed discussion of his Brazilian experience in 1575 only because he was then attempting a global conspectus in a book entitled *La cosmographie universelle d'André Thevet*. In his narration of his American experience in this account, Thevet proved himself more sympathetic, or perhaps nostalgic, towards the Tupinamba than when he had written in 1558, but he now also saw the need to explain why the colony had proven a failure.[28] This, he asserted, was due to the arrival there of Protestants who, by challenging the authority of Villegagnon, had created a situation, analogous to what had subsequently happened within the kingdom of France, where the wilfulness of Protestants in defying properly constituted authority rendered civil conflict inevitable.

This polemical charge provoked Jean de Léry to respond in kind in his *Histoire d'un voyage faict en la terre du Brésil*, published from Geneva in 1578 and followed by a second edition of 1580 that included illustrations, some possibly adaptations of those published by Thevet.[29] De Léry

[24] Ibid., chaps. 44, 45.
[25] Ibid., chap. 30; and chap. 24 with illustration, sig. 47v.
[26] Ibid., chaps. 35, 36, 43, with illustrations, sig. 82v, 83r.
[27] Ibid., dedication by Thevet to Cardinal de Sens.
[28] Andre Thevet, *La cosmographie universelle d'André Thevet* (Paris, 1575).
[29] Jean de Léry, *Histoire d'un voyage faict en la terre du Brésil* (Geneva, with the false publication address of La Rochelle, 1578); I have for this lecture used the second edition of de Léry, *Histoire d'un voyage* published in Geneva in 1580 as edited and annotated by Frank Lestringent (Paris, Librairie general Française, 1994); before de Léry had published on the subject Thevet's method

Figure 2. De Léry's portrayal of a captured enemy being prepared for execution.

emphasised that Thevet's charge lacked authority because he had returned to France before the colonists from Geneva had arrived in Brazil. The truth, according to de Léry, was that after the Calvinists did arrive, Villegagnon had taken an interest in Protestant theology and had represented himself as a protector of Protestants even to the extent of instituting their church on the far side of the Atlantic. Then, suddenly, he began to persecute them, and the Protestants had had to seek refuge among the Tupinamba Indians to escape from Villegagnon.[30] De Léry's account of what happened in Brazil was thus also a morality tale demonstrating that what had transpired there was later repeated in France where people in authority who once appeared sympathetic to the reformed faith and had been protectors of Protestants had later betrayed them. For de Léry, the *volte face* of Villegagnon had occurred the moment the Protestants on his island, which de Léry provocatively called Fort Coligny, were firmly within his power, after which he sought to make them his slaves or kill them.[31] Rather than submit passively to martyrdom, the majority of the Protestants escaped to the mainland where they were afforded genuine protection by the barbaric Tupinamba until they later returned to France as part of the general evacuation of the French colony.[32] Even then, they had to endure storm, extreme famine and disrespect from the captain and crew.

De Léry's contextualisation made it possible for him to develop a juxtaposition between the beliefs and mores of three distinct peoples: first, the Tupinamba Indians who had not had the opportunity to become Christians and who were undisputedly savages because they were cannibals; second, a band of true believers who had made a valiant effort to live their lives according to the Gospel despite having been exposed to an amazing range of tribulations; and thirdly those of the French colony who had remained loyal to Villegagnon who de Léry took to be a representative sample of the Catholic population of France.

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had already been criticised in print by his competitor de Belleforest on the grounds that he could not have been an eye-witness to everything, or much, he had reported on in *Les singularitez*; François de Belleforest, *La Cosmographie universelle de tout le monde* (Paris, 1575).

[30] De Léry, *Histoire d'un voyage*, preface, pp. 63–7, chap. 6, pp. 185–9, chap. 21, p. 511; when he spoke of three of their number being killed, de Léry was developing a point he had adumbrated in 1564 when he had submitted an entry on the first three Protestant martyrs who had died for their faith in America for inclusion in Jean Crespin, *Actes des martyrs deduits en sept livres . . . Hus* (Geneva, 1564).

[31] De Léry, *Histoire d'un voyage*, chap. 6; here he remarked (p. 165) that their oldest minister, Pierre Richard, first considered Villegagnon a second St Paul; de Léry contended however (p. 186) that Villegagnon's religious position had never been but dissimulation which fits uneasily with his charge (p. 183) that he was guilty of apostasy.

[32] The evacuation was treated in chap. 21, de Léry, *Histoire d'un voyage*, pp. 504–25.

Figure 3. De Léry's depiction of an idealised Tupinamba man, woman and child.

De Léry wrote with acuity on the habitat, economy and society of the Tupinamba Indians, and he appeared less judgemental than Thevet despite their concurrence that the Tupinamba were doomed to perdition if they persisted in their depraved state. In his optimistic passages, de Léry admired the natural qualities, strength and stature of those barbarians who became his hosts;[33] he credited them with restraint because they waged war only to avenge wrongs rather than to pursue wealth or aggrandisement;[34] he praised their technological dexterity in fishing, farming and manufacturing;[35] and, while regretting the inconstancy of those he had persuaded to kneel and pray, he concluded that if Villegagnon had remained true to reformed religion, and had accepted Calvin's offer to send 10,000 settlers to Brazil, the French colony would have flourished and the colonists might have converted some of the Tupinamba to Christianity.[36]

Histoire d'un voyage was hailed by de Léry's Protestant contemporaries as an outstanding exposition of ethnographic writing, and it has continued to enjoy that reputation among educated circles throughout the world, with Claude Lévi-Strauss lauding it in 1955 as a landmark ethnographic investigation.[37] Its virtues are the pace and vibrancy of de Léry's narrative and his empathy for the Tupinamba Indians. However, as was mentioned, the Tupinamba were but one of the three peoples with whom de Léry was concerned, and they became, in a sense, a foil against which he appraised the merits of the other two in what is as much a religious polemic as an ethnographic study. If de Léry sometimes followed the path set by Thevet, he frequently deployed the evidence he cited on the way of life of the Tupinambas to denigrate Catholics and to infuriate Thevet. Thus while, with Thevet, he deplored the shameless nakedness of the Tupinamba, he credited them with an Edenic innocence because, unlike in Christian society, their women did not expose their flesh with seduction in mind.[38] Similarly when de Léry described the bacchanalian dances of the Tupinamba the simile he chose was their becoming as drunk as priests.[39]

[33] The evacuation was treated in chap. 8, pp. 210–36, see especially, 226–7 where de Léry drew a word picture of the typical man and woman; there is an engraving from the second edition of what he described in words opp. p. 212 (reproduced here as Fig. 3).
[34] War was the subject of chap. 14, de Léry, *Histoire d'un voyage*, pp. 335–53.
[35] Ibid., chap. 12, pp. 296–305 is entirely devoted to fish and fishing, chap. 13, pp. 306–35 to crop cultivation and timber processing.
[36] Ibid., chap. 9, pp. 244–6; also 413–14.
[37] Claude Lévi-Strauss, *Tristes tropique* (Paris, 1955), p. 67.
[38] De Léry, *Histoire d'un voyage*, pp. 234–6
[39] Ibid., p. 252.

Then, when decrying the influence of *caraïbes* or soothsayers whom he, like Thevet, considered the instruments of Satan, de Léry dismissed them as false prophets akin to Popish peddlers of indulgences.[40] And when censuring the Tupinamba for seeking to exterminate their enemies through war, he declared them less reprehensible than Catholics in France who lusted after the blood of those of their neighbours, kin, and compatriots who chose to be Protestants.[41] Even when condemning the most savage trait of the Tupinamba, their gorging on the flesh and fat of their defeated enemies, de Léry professed them less blameworthy than Catholics whose belief in the doctrine of Transubstantiation gave sacramental sanction to the consumption of human flesh.[42]

De Léry was clearly bent on denigrating all Catholics when he contrasted their morality with the natural morality that obtained among the Tupinamba, but his ultimate purpose was to expound on the moral steadfastness of reformed Christians regardless of what trials and temptations they encountered. Thus when he deplored how mariners, interpreters and traders who had interacted with the Tupinamba had, in effect, gone native and taken delight in the licentiousness of their hosts, he was highlighting the uprightness of the Calvinists who, although living as refugees in the houses of the Tupinamba, had sought by example and persuasion to draw them to Christian living. Then as De Léry described how the ship's surgeon had gone among the Tupinamba to obtain some of the oils with curative powers that they extracted from tropical plants, he mentioned that the surgeon had also collected some jars of the human fat he had found dripping from the *boucane* on which the Tupinamba were roasting the flesh of their foes.[43] This surgeon's implicit condoning of cannibalism contrasted with the repugnance of the practice manifested by the Calvinists when they spurned the pressing invitations they received from their Tupinamba hosts to join them in dancing, drinking and gorging in the fat and flesh of their enemies.[44] And when he described how the Calvinists experienced excruciating famine on their voyage home, he explained that they had endured their agony rather than contemplate relieving their

[40] De Léry, *Histoire d'un voyage*, p. 396.
[41] Ibid.; war and man eating is the theme of chap. 15, pp. 354–77 which culminates pp. 376–7 in his outburst concerning the French Wars of Religion.
[42] Ibid., chap. 6, pp. 175–7.
[43] Ibid., p. 293; the *boucane* was the barbecue-like structure in use among the Tupinamba from which the French also derived the verb *boucané*.
[44] Ibid., p. 452.

Figure 4. De Léry's depiction of a young Tupinamba woman weeping to show welcome to a stranger.

hunger pains by consuming human flesh as was proposed by the ship's captain.[45]

De Léry's account of the famine at sea was especially poignant since he referred to it repeatedly in *L'histoire mémorable du siège et la famine de Sancerre*, the first book to appear under his own name which was published in 1573.[46] This detailed the privations experienced by a Protestant refugee community, with de Léry among its pastors, over the course of a three-month siege and bombardment at the height of the French Wars of Religion. Here de Léry recalled both his own previous experience of famine, and his witnessing the eating of human flesh by those he described as *les Sauvages Ameriquains en la terre du Bresil*.[47] These recollections were pertinent because, for de Léry, the scandal associated with the siege of Sancerre was that one Simon Potard among the besieged, together with his wife Eugene and an old servant woman, were found to have cooked and eaten parts of the body of their infant daughter who had died from hunger and despair. De Léry explained how, for this execrable crime, Potard and his associates—who, on examination, were found to have been previously expelled from the reformed church for scandalous living—were, after trial and public confession, brutally executed. This exculpated the starving Protestant community from any association with cannibalism.[48]

The examples that de Léry cited of the responses of people who had been exposed to temptation when forced to the limits of human endurance all illustrated that, under those circumstances, it was only those imbued with true Christian faith who could be trusted never to behave like beasts. By this standard, the Tupinamba, who everybody conceded to be savages, had, through the use of reason alone, learned to behave humanely in many circumstances. They were, therefore, more likely to enjoy the benefits of God's grace than were supposed Christians who invariably proved to be weak when confronted by challenges. To sustain this proposition, de Léry placed more emphasis, than had his rival Thevet, on the more humane and reasonable aspects of Tupinamba culture. Such admiration for the positive outcomes from natural reasoning would become a feature of all sixteenth-century Protestant writing on Native Americans.

[45] The famine on board, the famine in Sancerre, and the test that famine placed on human endurance are the subject of chap. 22, De Léry, *Histoire d'un voyage*, pp. 526–52.

[46] Jean de Léry, *L'histoire mémorable du siège et la famine de Sancerre* (Geneva, 1573); I have used the edition prepared by Géralde Nakam (Geneva, 2000).

[47] Ibid., p. 291.

[48] Ibid., pp. 290–5; see also Frank Lestrigant, *Cannibalism: the Discovery and Representation of the Cannibal from Columbus to Jules Verne* (Berkeley and Los Angeles, CA, 1997), esp. pp. 53–80.

De Léry's onslaught against Catholicism, and against Thevet, forced the latter to respond in kind. He had an opportunity to do so in the entries appertaining to the Atlantic world in his final published work of 1584; a biographical dictionary entitled, *Les vrais pourtraits et vies des hommes illustres*. Where, in his first Atlantic publication of 1558, Thevet had encouraged France to seize territories and opportunity in the South Atlantic from which the French had previously been excluded by the Iberians and the Papacy, he turned full circle in 1584 to defend the record of Iberian and other Catholic participants in Atlantic exploration from the malign detraction of Protestant authors. In doing so he gave particular attention to de Léry whom he accused of 'ravings, stupidities and fantasies'. Then, while conceding that Cortez and Pizarro had, like the Ancient Romans, achieved their conquest by force, Thevet asserted that, under natural law, it was permissible to answer violence with force, and insisted that the good that had resulted from the Spanish assertion of authority over 'a fierce and rebellious people', far outweighed any negative consequences of their actions. Essentially, as Thevet put it, 'sodomy, idolatry' and other 'pernicious corruptions (which were enough to condemn those poor Barbarians who wallowed in these horrors, to the deepest regions of Hell)', had been banished by the 'light of Christianity'. And Thevet made it clear that he saw himself to be responding to an international Protestant onslaught upon all Catholic colonisers when he charged that those who would criticise the Spanish for their cruelty towards Native Americans had refused to judge the actions of Martin Frobisher against the peoples of America by the same standard. In effect, Thevet was countering the Protestant contention that the critique by Las Casas had deprived Spanish (and, by implication all Catholic) colonisation of a moral purpose.[49]

If Protestant authors were combining to disparage the Spanish record in America, they were also contemplating how they might evangelise the indigenous population more effectively than the Iberians had transmitted their corrupt Christianity to the peoples of Central and South America. De Léry, as we noted, had represented the Protestant interest in America as benevolent and evangelical, and he had compiled word and phrase lists

[49] When writing this lecture I did not have access to André Thevet, *Les vrais pourtraits et vies des hommes illustres d'André Thevet* (Paris, 1584) and used instead *Portraits from the Age of Exploration: selections from André Thevet's Les vrais pourtraits et vies des homes illustre*, ed. Roger Schlesinger, trans. Edward Benson (Urbana, IL, 1993); quotations here come from pp. 31, 32, 33, 34; the specific entry on Cortés appears pp. 39–50, and Thevet's charge against de Léry appears on p. 134.

as well as a basic guide to the grammar of the *langage sauvage*, to facilitate conversation, trade and conversion.[50] Accounts of the effort of 1564–5 to establish a Protestant colony in Florida suggest that Laudonnière and his associates favoured a similar moderate approach to conversion. This attempt, building upon the earlier reconnaissance work of the Ribaults, attracted a broad spectrum of recruits, ranging from soldiers and sailors to members of noble families, and from labourers to craftsmen. These latter included the artist-cum-botanist Jacques le Moyne de Morgues, a committed Huguenot from Dieppe who wrote of the expedition, as did Laudonnière himself. These two narrations explained how the earlier Ribault expedition had established good relations with the local population which Laudonnière would have sustained if the idle and unsuitable colonists had not imposed unreasonable demands upon the food resources of the Indian community in times of scarcity.[51] Efforts by Laudonnière to assert his authority over his own colonists provoked many of the less-committed to desert, the more malicious of whom guided the Spanish expedition that destroyed the fort and slaughtered all but fifteen of the colonists. The survivors, including Laudonnière and Le Moyne, returned to France where they wrote of the expedition, and Le Moyne embellished the narrative with engravings composed either from memory or from drawings that he, or others, had brought home.

These accounts expounded on the duplicity of the deserters and the perfidy of the Spaniards, and the authors dwelt on what might have been, and on what Protestants might achieve in more propitious times.[52] To this end they praised Florida as a place in which to establish a colony; they expounded on the wealth of the region, both in mineral resources and in its land, flora and fauna; they wrote of the openness and generosity of the natural inhabitants who were innocent in the affairs of this world to the point where Laudonnière had to prohibit his men from accepting from them gold, silver and precious stones in exchange for baubles; and they praised the reasonableness of the political, social and military organisation maintained by the Floridian Indians, and their easy relationship with their natural environment which provided them with plentiful supplies of grain, game, fish and roots. These authors, like de Léry, bewailed the influence of sorcerers who, they contended, encouraged war and the savage

[50] De Léry, *L'histoire d'un voyage,* chap. 20, pp. 479–503.
[51] This was so suggested by Laudonnière in Richard Hakluyt, *Principal Navigations*, vol. 9, p. 76.
[52] The overall subject is comprehensively treated in the introduction to Paul Hulton (ed.), *The Work of Jacques le Moyne de Morgues: a Huguenot Artist in France, Florida and England*, 2 vols. (London, 1977)

mutilation of their enemies. Generally, the authors found the people dignified, handsome and ready to be guided to Christian worship as was proven when they had taken to kneeling before the column the Ribaults had erected to mark French possession of the region.[53] If Le Moyne and Laudonnière continued to regard the Floridians as savages, they saw much to admire in their way of life, and they absolved them from responsibility for the breakdown in relations that had occurred. They commended the Floridians especially for their moderate behaviour at feasts, unlike many in the French colony 'who deserve to be handed over for training to these base uncivilized creatures and brutish people in order to learn restraint'.[54]

What Thomas Harriot had to say of the inhabitants of Roanoke Island in his *Brief and True Report* was similar in style, tone, and content to what Laudonnière and Le Moyne had said of the Floridians. Also when rendering his observations more credible for readers in Europe, Harriot frequently compared the life styles of his Virginians with Le Moyne's

Figure 5. Le Moyne's representation of Floridians treating a French column as an altar.

[53] The column is shown in Hulton (ed.), *The Work of Jacques le Moyne*, vol. 2, plate 100, p. 141.
[54] Hulton (ed.), *The Work of Jacques le Moyne*, vol. 2, p. 148.

Figure 6. Le Moyne's depiction of Floridians going into battle in an improbable phalanx form.

Floridians, and some of the details he provided, such as his attribution of the supposed long life of the Virginians to their abstemiousness, were obviously derived from what Le Moyne had said of the natives of Florida. And Harriot also concluded that the 'poor souls' who had previously not known God were 'very desirous to know the truth. For when we went down on our knees to make our prayers unto God, they went about to imitate us, and when they saw we moved our lips, they also did the like.'[55]

The consonance between the Harriot and Le Moyne accounts of their experiences is unsurprising given that they interacted in England after 1581 when Le Moyne had found refuge there 'for religion'. Each also enjoyed the patronage of Sir Walter Raleigh and through him that of Lady Mary Sidney who, in 1587 (the year before Le Moyne's death), intro-

[55] Thomas Harriot, *A Brief and True Report of the new found land of Virginia* (London, 1588); I have used the version with engravings, based principally on the drawings of John White, that was published in 1590 in Frankfurt by Theodore de Bry and that has been reproduced in a scanned version in Paul Hulton (ed.), *America, 1585: the Complete Drawings of John White*; the quotation comes from fig. 25, p. 127.

duced Le Moyne and Harriot to Theodore de Bry, then a Frankfurt publisher, on the occasion that de Bry visited London. Paul Hulton and David B. Quinn, who have studied this interaction closely, believe that the three then together decided upon the content of Theodore de Bry's *America* which drew heavily upon the verbal and visual depictions of the life of Native American peoples that had been compiled by Le Moyne and Harriot, and also by de Léry. Using these, de Bry created a visualised narrative of Protestant interactions with the native populations of the Americas during the late sixteenth century. Then, in the ever-expanding later editions that continued to appear until 1634, de Bry contrasted these recent Protestant undertakings with what he represented as the unremittingly cruel Spanish engagement with the peoples of America over the previous century.[56]

De Bry's *America*, following upon the texts by de Léry, Laudonnière and Le Moyne, were complemented by English language texts devoted to exploration and discovery produced by Harriot, Hakluyt, Purchas, Raleigh and others. Collectively, these pronounced on what opportunities the Atlantic world and its peoples offered to Protestants at that moment. They appreciated that the Atlantic World had been generously endowed by God with vast resources whose potential had been but partly realised because the lands had previously been inhabited by inexpert peoples, many of whom had been tyrannised by the Iberians who had further proven their irresponsibility by failing to induct these people into a Christian polity. Instead, the Iberians had concentrated on identifying the source of the precious metals being used by the Native Americans in several parts of America; on exploiting the labour of the indigenous populations and introducing slaves from Africa to further their cupidity; and on excluding other Europeans, and particularly Protestants, even from those parts of America they could not themselves occupy. Then, as they contemplated the condition of the indigenous population, the Protestant authors were agreed that these were unquestionably a savage people under the influence of Satan whose agents had encouraged their more perverse habits. This depressing conclusion was counterbalanced by evidence that the American Indians were also generous and hospitable, were endowed with natural intelligence, and had, in several instances, welcomed Protestants as allies against the

[56] The Protestant character to the de Bry text is borne out in Michèle Duchet, *et al*. (eds.), *L'Amérique de Théodore de Bry; une collection de voyages protestante du XVIe siècle* (Paris, 1987); see also Michiel van Groesen, *The Representation of the Overseas World in the De Bry Collection of Voyages* (Leiden, 2008), who disputes that it was necessarily Calvinist propaganda.

Iberian tyrants. Even more encouraging, they had repeatedly proven themselves open to the Christian message, and ready to share the resources of their lands with those able to exploit the riches of the earth to their mutual benefit. By such reasoning, Protestant authors concluded that they now had a responsibility, with or without the support of their governments, to mobilise expeditions, that would include clergy and scientists as well as labourers and soldiers, to engage upon a collective endeavour to absorb the peoples and the lands of the Americas into a reformed Christian community. Thus they aspired to start the colonial process all over again, and they expressed themselves confident that, in a short time, the Atlantic World would become a Protestant rather than a Catholic space.

II

It was in this spirit, during the early decades of the seventeenth century, that several ventures were directed by Northern European promoters of colonisation to those parts of America not occupied by the Iberians, principally along the coastline and into the estuaries, of the North American continent, and in several Caribbean islands. While this burst of activity led, in several instances, to an enduring European presence, it did not produce the Protestant outcome that had been predicted confidently by the sixteenth-century enthusiasts. It is even more surprising, given the competitive edge to the Protestant propaganda, that those who claimed to have been inspired by the sixteenth-century advocates of Protestant colonisation proved lax in promoting missionary and scientific endeavours.

Moreover, what Protestant promoters of colonisation undertook and accomplished in the seventeenth century fell short not only of the standards laid down by the sixteenth-century treatises that were invoked to legitimise their actions, but they fell short also of the evangelisation and investigative efforts being pursued in the increasingly Catholic French-sponsored colonies of their own time. The seventeenth-century Protestant reform efforts also looked derisory when compared with the reforms promoted by the Iberians in their colonies over the course of the sixteenth century, which Protestant authors had consistently disparaged. Individual English Protestant actors, including William Wood and Roger Williams in New England and Alexander Whitaker and Henry Spelman in Virginia, strove by word and deed to have the colonies with which they were associ-

ated pursue a moral purpose.[57] However, such individuals proved exceptional, and they failed to win official endorsement for the evangelisation, educational, and scientific programmes they favoured. In practice, most Protestant efforts at Atlantic colonisation ignored or dismissed the cultures and languages of the Native American and African slave populations over whom they exercised control in the Americas. Neither did Protestants make any sustained effort to convert either Native American or African slave populations to Christianity. Even more surprising, in light of Protestant criticism of Spanish tyranny, Protestant colonists of many nationalities took advantage of the slightest pretext to launch attacks upon Native American peoples and, following victory or even massacre, to seize their lands. Such actions passed without serious criticism either from within the colonies themselves or from within the metropolitan societies that had promoted colonies previous to the second half of the seventeenth century when Quakers, and later still Protestant evangelical groups, pleaded by word and example for more humane strategies for dealing with subordinate populations.[58]

It has long puzzled historians why Protestants, who had long resented being excluded from Atlantic opportunities by the Catholic powers, devoted themselves primarily to making profit, to the neglect of evangelical and scientific pursuits, once they had secured access to vast areas of the Atlantic world. Some have attributed what appears to be a Protestant reluctance to seek the conversion of Native Americans—and later of African slaves—to the possibility that the attachment of Calvinist promoters of colonisation to the doctrine of Predestination convinced them of the futility of seeking to convert people whose way of life suggested they were bound for perdition. This argument is unconvincing not only because it is simplistic and disrespectful of Calvinism as a creed, but also because de Léry, Le Moyne, de Bry, and Harriot, whose writings would have been familiar to all Protestant promoters of colonisation, were as committed to evangelism as they were to Calvinism, and had pronounced on the moral responsibilities of Christian colonists towards less fortunate peoples.

[57] On these and other enthusiasts for moderate reform see Nicholas Canny, 'England's New World and the Old, 1480s–1630s', in Nicholas Canny (ed.), *The Origins of Empire*: *Volume I, The Oxford History of the British Empire* (Oxford, 1998), pp. 148–69.

[58] Jill Lepore, *The Name of War: King Philip's War and the Origins of American Identity* (New York, 1998).

Scholars who have addressed disparities between Protestant and Catholic practice of colonisation in the seventeenth century have usually set the experience of New England against that of French Canada.[59] This is open to the criticism that it is not comparing like with like given that the ambition of the New England Puritans was to achieve moderate self-sufficiency in reasonably stable village communities, while many French settlers in Canada led the peripatetic life associated with trapping and fur trading. A more valid comparison may be between the experiences of the English and French colonies established on various Caribbean islands in the early seventeenth century. These were promoted in both instances with the purpose of acquiring, producing, and processing a similar range of commodities including pearls and dye-woods, cotton, tobacco, indigo, and sugar. Royally appointed governors were more prominent in the French than in the English colonies, but those who set the pace in both the English and French islands were individuals from commercial or privateering backgrounds whose primary interest was profit. The ventures were similar also because the labour force in each included European indentured servants and both Native American and African slaves.

The first contemporary to reflect on this phase of colonisation was the anonymous author of a text bearing a title consciously borrowed from José de Acosta—*Histoire naturelle & morale des iles Antilles de l'Amerique*. Despite the author's deference for the excellent 'Jose Acosta' this was an unmistakably Protestant work with a frontispiece depicting an allegorical figure of France extending a hand of welcome to the *Caraïbes* but accompanied by a Protestant pastor holding open a bible to them. The text was published anonymously from Rotterdam in 1658 but its author was soon identified as Charles de Rochefort, a French Huguenot resident in the Netherlands who had spent some years as a missionary in the French West Indies where he made the acquaintance of Raymond Breton, a French Dominican priest then in charge of the Catholic mission to the French islands. Pérè Breton had become an authority on the grammar and vocabulary of the language used by the native population of the islands now being claimed by France, and his word-list had been incorporated by de Rochefort into his text as if it were his own. However, de Rochefort contended that his portrayal of the lives of those he described as *les Caraïbs insulaires* was based on fieldwork conducted by

[59] The most sustained comparative study to date has been that between Spanish and English colonisation in J. H. Elliott, *Empires of the Atlantic World: Britain and Spain in America, 1492–1830* (New Haven, CT, 2006).

himself and one M. du Montel, particularly on the island of St Vincent where, he suggested, the native population had been least disturbed by European intrusion. Whatever about his direct observation, de Rochefort seems to have reported what his eye was prepared to expect since his account of the lives of the *Caraïbs* was, in effect, a regurgitation of what Jean de Léry had written almost a century previously of the lives of the Tupinamba of Brazil. De Rochefort expressed no surprise that the habits of peoples separated by both time and distance would be similar, because he contended (contrary to what de Acosta had concluded) that all the indigenous peoples on the islands and mainland of America derived from a single stock; an opinion in which he believed he was supported by de Léry. Therefore, the only original dimension to de Rochefort's text was his inclusion of naïve illustrations of some of the islands' plants and animals together with some depictions of Native Americans, African slaves and European overseers in various work poses.[60]

Despite its limitations, de Rochefort's was the most serious attempt by any Protestant author of the early seventeenth century to write a natural history of either the French or English islands designed to explain how the various populations on the islands might be civilised and evangelised and how the resources of the islands might be better comprehended and exploited for human benefit. Its impact was limited because it was less systematic scientifically than the texts that would soon be published by Catholic authors on the same subject, and it fell short also of the organisational and illustration standards set by the *Historia Naturalis Brasiliae* authored jointly by the Protestant authors Willem Piso and George Marggraf and published in Amsterdam in 1648, a decade before de Rochefort was printed.[61] De Rochefort's publication did have one early consequence, however, because his stated ambition to convert the *Caraïbe* population to *reformed* religion outraged French authorities. These, who were already resentful of the limited toleration that had been accorded to Calvinists under the terms of the Edict of Nantes, could not countenance Calvinism being promoted as the official religion of French colonies.

Those most threatened by de Rochefort were members of the Dominican order that, in 1635, had been nominated by Cardinal Richelieu,

[60] *Histoire Naturelle et Morale des Antilles de l'Amerique. Enrichie de plusiers belles figures raretez … avec un vocabulaire caribe* (Rotterdam, 1658).

[61] *Historia Naturalis Brasiliae* . . ., by Guilielmi Pisonis, MD, and Georgi Marcgravi (Amsterdam, 1648); see also Júnia Ferreira Furtado, 'Tropical empiricism: making medical knowledge of colonial Brazil', in Delburgo and Dew (eds.), *Science and Empire in the Atlantic World*, pp. 127–51.

Figure 7. Frontispiece to de Rochefort's text

and appointed by the Papacy, to evangelise the indigenous population of the French Antilles. In practice, the Dominicans had been active on the islands since 1635, and Pérè Pelican, their first missionary, had become a martyr having been killed by some *Caraïbes*. These early priests had included Pérè Raymond Breton whose linguistic studies resulting from thirteen years spent in the Antilles had, as was noted, been plagiarised by de Rochefort. The Dominicans now proceeded urgently to make good their apparent neglect by publishing some major works relating to the missionary work they had been engaged upon. Thus, in 1664, there appeared in print a sequence of works by Pérè Breton—a *Petit catéchisme*; a *Dictionnaire caraïbe-françois*; a *Dictionnaire françiose-caraïbe*; and a *Grammaire caraïbe*—which clarified how committed he had been to promoting Catholicism on the French islands.[62] These texts were followed by a four volume *Histoire general des Antilles habitées par les François* by Pérè Jean Baptise du Tertre, published serially in Paris 1667–71.[63] This treated of the years 1641–54 when du Tertre had been head of the Dominican mission to the Antilles. Du Tertre may not previously have contemplated having his work published in printed form because he, like all Catholic missionaries, would have already lodged a report on his endeavours in the archives of his order. It now proved necessary to rework any such reports into book form both because de Rochefort had preempted what would have seemed the duty of the Dominicans and, perhaps more urgently, because Antoine Biet, a French Jesuit who, according to du Tertre, had spent but seven weeks on Guadaloupe treating his rheumatism with hot baths, had turned Judas and charged the Dominicans with *libertinage et d'impiete* and neglect of duty.[64]

Given this background, it is unsurprising that there was both a polemical and an apologetic edge to du Tertre's mammoth work. The polemical aspect was particularly evident when he displayed hostility to Protestants and Protestantism including those, among them the ship's captain, who had accompanied him from Dieppe on his outward journey. Also, as he traced the development of a French community in the Antilles, he attributed the unhappy sequence of revolutions, tumults,

[62] All of these, published in Auxerre in 1664 and the years immediately following, have been reprinted in *Coleccion Linguistica Americana*, *Tomo Primero* (Paris, 1877); for a study of how Catholic priests went about the study of, and instruction in, Native American languages see Mac Cormack, *On the Wings of Time*, pp. 170–201.

[63] Revd Pérè J. B. Du Tertre de l'ordre des ff. prêcheurs, *Histoire general des Antilles habitées par les François* (2 vols., Paris, 1667 *et seq.*).

[64] Ibid., II, p. 404; he mentioned that Biet had written *l'Histoire de la France équinocial* by which he meant Antoine Biet, *Voyage de la France équinoxile a l'isle de Cayenne* (Paris, 1664).

intrigues and persecution of the Church, that had marked its short history, as much to the presence on the islands of Calvinist elements—notably M. le Vasseur who had attempted to establish *une petite Geneve* on the island of Tortüe, and General de Poincy who had expelled Capuchin monks from St Christophe[65]—as he did to the unsuitability or criminality of many colonists.

This depiction by du Tertre of the uncertain and unsatisfactory start to the French colonies preceded his summation of the military, material and spiritual achievements of the French in the Antilles which made the case that the initial difficulties had been overcome. He gave most credit for the progress made to some far-sighted governors, but when he described the creation of a parochial system and the efforts to induce both the indigenous population and African slaves to attend Christian worship he was clearly vindicating the spiritual endeavours of the Dominicans. However, du Tertre, no less than the Spanish and Portuguese priests who had provided moral guidance to the Iberian Atlantic colonies of the sixteenth century, recognised that his responsibility only started there, and he proceeded, as they had done, to detail the natural resources of the islands (mineral as well as vegetable, animal and marine); to explain what European and African crops and animals could also be raised there; to discourse on the medicinal and nutritional properties of the plants that grew on the islands; to consider how the three segments of the population (French, African, and Native American) might be better integrated into a civil and Christian order; and to detail, with the aid of precise illustrations, how the various crops that had commercial potential—tobacco, ginger, cotton, and sugar cane—might be better produced and processed. As he launched upon this natural history it was clear that he had consulted Protestant as well as Catholic authors, including de Rochefort whom he cited frequently and corrected only when he believed him to have erred in detail.[66]

The natural history element of du Tertre's work was clearly based on evidence he had compiled during his years on the islands, and his scientific proficiency suggests he had been considered qualified for the Antilles mission as much because he was a trained scientist as an ordained priest. His scientific cast of mind was apparent even from his account of his travels to and from Europe, and from one island to another, where he sought

[65] Du Tertre, *Histoire general,* I, pp. 177, 304.

[66] The first volume of Du Tertre, *Histoire general* was devoted principally to a narrative of how each of the French islands had developed politically, and the second volume treated of the natural history of the Antilles in more generic terms.

explanations for, and compiled data on, such matters as the flux and reflux of the oceans, temperature variation and seasonal change in the West Indies, and the frequency of hurricanes. Later, as he moved about the islands to administer the sacraments, he identified the rocks, minerals, clays and materials that might have economic potential, and he related his observations to the published work of European scientists.

That the choice of a scientist to lead the mission was no accident became clear in 1693, when the Dominicans were again appointing one of their order to direct their work in the Antilles. This time the position went to the thirty-year-old Pérè Jean Baptiste Labat whose previous experience, besides being a preacher, was as a teacher of Philosophy and Mathematics, and who had in his luggage some scientific books and instruments, including a microscope. More to the point, his subsequent multi-volume 1722 publication, *Nouveau voyage aux isles de l'Amerique contenant l'histoire naturelle de ces pays* …, was a conscious revision and expansion upon what du Tertre had written. Revision was necessary because French possessions in the Caribbean had been considerably modified by the diplomatic negotiation associated with wars and treaties, because the economy and societies in the islands dominated by France had undergone significant change since then, and because improvements in science and technology (including the technologies used for map making and engraving) made it possible for Labat to convey a more vivid picture of the peoples' mores and of economic opportunities than could have been accomplished in du Tertre's time.[67]

Together, these two works provide baseline studies on the natural history of the French West Indies which match in character and authority the natural histories compiled by Spanish and Portuguese priests who had worked in Central and South America during the sixteenth century. They match also the reports on the populations, resources and potentials of Canada (most of them unpublished) that were compiled and filed by Jesuit fathers over the course of the seventeenth century. What remains to be explained is why no scientific literature of the same quality was published about any of the Caribbean islands dominated by Protestant interests, previous to the scientific study of Jamaica undertaken in the late 1680s by Sir Hans Sloane and published by him in 1707 and 1725.

One factor that made it possible for du Tertre and Labat to proceed almost effortlessly with their task was that they were working in a

[67] Revd Pérè Jean-Baptiste Labat, *Nouveau voyage aux isles de l'Amerique contenant l'histoire naturelle de ces pays* … (Paris, 1722: I have used the second edition of 1742).

well-established scholarly tradition that had been maintained by Catholic missionaries from several orders, including Dominicans, principally in Portuguese and Spanish colonies, over the course of the sixteenth century. While the Protestant propagandists of the late sixteenth century expressed disdain for the scientific writings of all Franciscans, Dominicans and Jesuits, with the exception of Las Casas and de Acosta, they could recommend no Protestant-authored texts that potential disciples might follow which were as comprehensive and methodical as those executed by the priest/scientists. This paucity of earlier Protestant scientific authors may explain why de Rochefort claimed to have been as much inspired by the Jesuit de Acosta as by the Protestant de Léry.

If those with an interest in writing natural histories from a Protestant perspective had few models to follow, they also lacked the patronage and the opportunity to acquire a scientific training that had become institutionalised within the Catholic Church from the moment that Portuguese and Spanish authorities had grappled with the moral issues presented by their early engagement with the New World. Thus where, in the middle of the seventeenth century, du Tertre enjoyed the support of church, crown and some governors to proceed with his scientific work on the French Antilles, those who wrote at about the same time on the English experience in the West Indies could rely on no such official munificence. They looked instead to private sources, and the nature of the support available to particular authors seems to have shaped the character of their compositions. This certainly seems true when we examine three texts treating of the English experience in the West Indies compiled about the same time as du Tertre's four-volume publication.

The texts in question were: Richard Ligon, *A True and Exact History of the Island of Barbados*, published in 1657; John Davies *The History of the Caribby Islands in Two Books the first containing the Natural, the second the Moral History of those islands … with a Caribbean Vocabulary*, published in 1666; and Richard Taylor's *History of his Life and Travels*, compiled in 1687. Of these three, the Taylor text did not appear in print until 2008. However the author clearly had publication in mind because he not only kept a diary of his time spent and his observations made when on various assignments in Jamaica, but he also subsequently reshaped his text and added some drawings of plants and animals presumably in the hope of making money from sales. We can speculate that the reasons it then failed to find a publisher were because he had nothing original to say, because it was known that Hans Sloane was working on the same subject, and because Taylor described things as he saw them in preference to culti-

vating favour with planters, merchants, or others with influence, who might have acted as patrons for him.[68]

Davies certainly wrote in the hope of earning royalties from a public curious about an important subject on which relatively little had been written. To this end, he proceeded rapidly and at low cost, but what he put together was no more than a translation into English of de Rochefort's text on the French West Indies and a transmigration to the English islands of what de Rochefort had had to say of the flora, fauna, human habitation and indigenous language spoken on the French Antilles.[69]

Although composed earlier than either the Taylor or Davies texts, that by Ligon is of greater scientific merit, and was based on his observations during the years 1647–50 which he spent on Barbados.[70] He, like the French authors, described the outward journey with the stops on the way; itemised the commodities with commercial value being produced on Barbados; identified the different segments of which the population of the island was composed; and supplied some arresting word pictures of life on the island. However where du Tertre and, after him, Labat reported according to a well-established template designed by Catholic missionaries, Ligon organised his text to praise the achievements of the more successful sugar planters on Barbados who had probably financed his journey and entertained or employed him during his stay, and to encourage enterprising people in England to invest in sugar production. To those ends, he estimated the profits that the more successful planters had made; he described the work routine and calculated the investment required for successful sugar production; and then, presumably for the sake of scientific precision, he appended what might be described as a fold-out tradesman's drawing of the 'ingenio that makes the sugar'. Ligon's text was exceptional by English standards but appears utilitarian when set against those of the French priest/scientists, in that he used rather than contributed to knowledge, and encouraged sugar cultivation regardless of the human and environmental

[68] David Buisseret (ed.), *Jamaica in 1687: The Taylor Manuscript at the National Library of Jamaica* (Kingston, Jamaica, 2008).

[69] *The History of the Caribby Islands in Two Books: the First Containing the Natural, the Second the Moral History of those Islands … with a Caribbian Vocabulary by John Davies of Kidwelly* (London, 1666).

[70] Richard Ligon, *A True and Exact History of the Island of Barbados, Illustrated with a map of the island … together with the Ingenio that makes the sugar* (London, 1657); for an excellent edition of the second modernised imprint of 1673, with introduction and details on Ligon's career, see Karen Ordahl Kupperman (ed.), *A True and Exact History of the island of Barbados by Richard Ligon* (Indianapolis, IN, 2011); for a more sympathetic appraisal see Susan Scott Parrish, 'Richard Ligon and the Atlantic Science of Commonwealths', *William and Mary Quarterly*, 67(2) (2010), 209–48.

costs that he did mention but in a less emphatic manner than the French Catholic authors who made clear their moral objection to what they defined as the excessive cruelties inflicted by masters upon their slaves.

By the time the texts by Ligon and Davies were published some more reflective scholars in England had come to recognise that their country had fallen behind in the scientific study of the world outside Europe, including of its own colonies. To make good the deficit, the Royal Society of London, chartered by the crown in 1660, began to assemble data on several aspects of life in Britain's own colonies, initially (as had been done by the Spanish authorities even during the sixteenth century) by addressing questionnaires to reliable agents (frequently clergymen) resident in various locations.[71] This was a poor substitute for having trained scientists working on site, and the opportunity to have such in the West Indies came in 1687 when Hans Sloane, an active member, and later Secretary, of the Society, was invited to serve as physician to the household of the Duke of Albemarle during his term as governor of Jamaica; an island of which little was known scientifically in London given that it had only become a British possession in 1655.[72] Sloane, an active botanist as well as a physician, accepted the sinecure, believing that time in Jamaica would give him the opportunity to study the vegetation of the island and to relate the trees, flowers, ferns, fungi and flora he found there to the taxonomies on plant species in other parts of the world that he, with colleagues in London and correspondents throughout Europe, had been compiling. Sloane's observations ranged well beyond plant life, and in his medical practice in Jamaica he seemed more interested in the diseases suffered by the slave population, and the appropriate treatments for them, than in the mundane ailments of the white elite families for whose well-being he was principally responsible. This association with the Africans led him to discourse more generally on the condition of slaves on the island and of their domestic and cultural lives. Sloane's interests were more narrowly focused than those of the French authors and he did not treat either of possible evangelisation or of commercial crop production, manufacture and trade. However, like the French authors, he transmitted information on his scientific investigations to associates in his own country even when his findings were not ready for publication. Then, he surpassed his Catholic

[71] See Susan Scott Parrish, *American Curiosity: Cultures of Natural History in the Colonial British Atlantic World* (Chapel Hill, NC, 2006).

[72] The contents of the succeeding paragraphs relies on the words in Hans Sloane, MD, *A Voyage to the Islands of Madeira, Barbados, Nieves, S. Christophers and Jamaica with the Natural History of the Herbs and Trees … To which is prefixed an Introduction wherein is an account of the Inhabitants, Air, Water, Diseases, trade &*c (2 vols., London, 1707, 1725).

counterparts, at least as a plant scientist, because as well as being familiar with what had been reported on the natural history of the New World by Portuguese, Spanish and French priest/scientists from the moment of Columbus's first landing to his own time, Sloane corresponded and exchanged plants with those who maintained gardens and glass houses in places ranging from Kew Gardens in London and Moira Castle in County Down, to Leipzig, Uppsala, Amsterdam and Paris. He was exceptional among Protestants in conceding that sixteenth-century Spain had attained an ascendancy in the scientific study of the New World, and that he should logically commence his own work by mastering both what the sixteenth-century priest/scientists from Spain and Portugal had written, and the work that had since been accomplished by missionary priests (including du Tertre and Labat) who had followed in their tradition.

The reason why Sloane was more open than his Protestant predecessors and contemporaries to embracing, and building upon, Catholic science may be because, after a schooling in County Down in Ireland that prepared him for university, he had proceeded to Montpellier—still then a Huguenot outpost—rather than to Glasgow or Trinity College Dublin where most Ulster Protestants of his generation who attended university would have enrolled. It was seemingly at Montpellier that he became acquainted with Catholic as well as Protestant publications on the Natural History of the New World, and it would seem to have been after his time there that he constructed a network of correspondence with scientists in many countries, regardless of religious confession, to whom he continued to write and supply seeds and plants throughout his working life.[73]

The factors that contributed to Sloane's success as a consequential scientist of the Atlantic World—his personal talent and training, his respect for the achievements of other scientists regardless of religious persuasion, and his securing patronage that enabled him to concentrate on his interests—had also been available to Willem Piso and George Marggraf, the two Dutch-sponsored Protestant scientists who authored the *Historia Naturalis Brasiliae*, previously mentioned. These two were among the several men of talent (including artists) who had been invited to South America by Johan Mauritz Count of Nassau during the interlude, 1637–44, when he served as governor at Pernambuco on behalf of the Dutch West India Company. Believing, or hoping, that the foothold the Dutch had gained on the coastline of North-Eastern Brazil would become permanent, Nassau commissioned scholars and artists to study,

[73] See the entry on Sloane in *Dictionary of Irish Biography* (Cambridge, 2008), vol. 8, pp. 1002–4.

explain, and illustrate the natural wealth and human and economic potential of the area in which the Dutch now had a presence. Piso himself, who had had a medical training at Leiden and had made the acquaintance of the best scientists there, was primarily interested in the medicinal properties of the plants he described and illustrated, and in the maladies (including snake and spider bites) for which these plants provided antidotes regardless of whether this knowledge came from studies by Portuguese or Spanish priest/scientists or the practical information supplied by Native American and African 'medicine' people. He was also interested in the commercial potential offered by some crops and included some illustrations on manufacturing processes, notably sugar.[74] It was left to George Marggraf, his co-author, to provide a more comprehensive listing of the plants, animals, fish, shellfish, birds, serpents and insects in the region and to relate what he was describing to the categorisation of plants and animals that was being proceeded with by scholars in Europe. It fell also to Marggraf, a trained mathematician, to explain climatic conditions and to construct climatic charts. He also identified the various populations that were indigenous and imported to the region, and the nomenclature being used to designate the various permutations that had produced people of mixed race. Marggraf also included some pictures of indigenous men and women and described their body ornamentation.[75] However, instead of prescribing a strategy for their conversion he incorporated a text by a Jesuit priest, Joseph Anchieta, which treated of the Brazilian language and grammar together with a dictionary on the language he had studied and some comments on Brazilian religion.[76] The Marggraf section to the volume also included summations of texts by Jacobi Rabbi and Elia Herckmanao on the mores of the Tupi people. The composite volume concluded with an appendix devoted to Chile that was seemingly extracted from a Natural History of Chile by another Jesuit priest, Alonso d'Ouaglie.

This brief appraisal of the *Historia Naturalis Brasiliae* confirms the view we have already formed following a consideration of the scientific work of Hans Sloane that, given the right circumstances, Protestant scientists were every bit as capable as Catholic priest/scientists of executing

[74] *Historia Naturalis Brasiliae* …, pp. 50, 51, 53; an even better measure of Willem Piso's real interest is a subsequent publication, *De Indiae utriusque re naturali et medica* (Amsterdam, 1658); in this he linked again with George Marggraf but now also with Jacob de Bondt who expounded on the medicinal properties of plants in the East Indies.

[75] *Historia Naturalis Brasiliae* …, pp. 268, 270.

[76] Ibid., pp. 274–8.

scientific studies of colonial regions that conformed to the highest international standards. It has become equally clear, however, that each of these works was the product of exceptional circumstances and that neither text moved from purely scientific issues to consider if, or how, Native American or African slave populations who lived in the environments being studied might be converted to Christianity. What remains to be explained therefore is what were the circumstances that helped and hindered the work of scientists and evangelists and why, as seems to be the case if we are to be guided by experience in the West Indies, Catholic authors seemed better able than their Protestant counterparts to overcome these difficulties.

The immediate factor that militated against the persistence with what might be described as the benevolent colonisation advocated by the Protestant publicists of the late sixteenth century, was that the war waged at sea against Spanish interests in the Atlantic forced the abandonment by Northern Europeans of attempts to establish colonies until peace was restored in the early seventeenth century. Then, as Kenneth Andrews has argued in the case of England, and the same held true of both France and the Netherlands, those Protestants who resumed the task that had been abandoned were those who had flourished from privateering, or even piracy, during the years of conflict.[77] These had become accustomed to earning high yields from modest, albeit risky, investments, and, regardless of whether they sponsored colonisation from Europe or became planters or merchants in the West Indies, they displayed scant interest in promoting either scientific studies or evangelisation programmes. Neither did they devote attention to the moral character of those they recruited in Europe to serve in the colonies as artisans, traders or indentured servants. Consequently moralists from all colonial locations and both religions deplored the ungodliness of those European settlers who confronted them, and contended that any evangelical mission must necessarily commence with them. Du Tertre as was noted complained of what he perceived as a heavy presence of Calvinists among the early colonists but he pleaded also that, regardless of which confession they professed, French settlers were so ungodly that they could be persuaded to attend church only when they had been terrified by hurricanes. He also deplored the widespread sexual exploitation of African slave women by French planters and servants that had resulted in a mulatto population on the islands.

[77] Kenneth R. Andrews, *Trade, Plunder and Settlement: Maritime Enterprise and the Genesis of the British Empire, 1480–1630* (Cambridge, 1984).

These impediments meant that no reform agenda could make progress in any colony unless it was promoted by either external intervention or internal interests. In the case of the English colonies, those planters who sponsored Richard Ligon were interested in having him pronounce positively on their achievements, and they obviously would not have countenanced any serious criticism of their shortcomings. Then when Hans Sloane received external support from the Royal Society to pursue his own scientific interests in Jamaica, neither he nor his sponsor seemed interested in making Christians of African slaves. Again, while Johan Mauritz of Nassau promoted the scientific study of that part of Brazil in which the Dutch had secured a foothold, he (and the scholars he sponsored) evinced little interest in, or possibly despaired of, converting the native population to Christianity. This apparent neglect of missionary concern by these two Protestant parties may have been a tacit acknowledgement by them that their churches lacked the personnel that would have been required to undertake a serious evangelisation drive. The fact that each party also drew heavily upon the previous publications of Catholic scholars for their scientific work suggests that they had come to recognise as misguided the determination of the Protestant enthusiasts of the late sixteenth century to reject as necessarily corrupt most studies by Catholic authors and to proceed *ex nihilo* to comprehend the Atlantic world, and to seek the conversion of its various non-Christian populations. Disregarding previous Catholic investigations of the problems involved seemed especially shortsighted given that Protestants lacked the human resources to undertake large scale reform and conversion programmes outside their home societies, where reform was still in process and back-sliding remained a constant problem. The human deficit was, for example, manifested in the case of the Church of England by its persistent inability throughout the seventeenth century to fill vacancies in the Protestant church they were fostering in Ireland which English officials and churchmen would have considered an altogether higher priority than missionary activity in any colony on the far side of the Atlantic.[78] By way of contrast, external intervention in the French colonies came primarily from the state, which meant that, once the French monarchy had decided that only Catholicism was to be pro-

[78] In comparing the efforts made by New England Congregationalists and French Jesuits to convert Native Americans, Dan Richter has found that, for all their enthusiasm, New England Puritans lacked the trained personnel to mount any significant conversion campaign; Daniel K. Richter, *Facing East from Indian Country: a Native History of Early America* (Cambridge, MA, 2001), pp. 85–7.

moted in the colonies, Catholic religious orders were made responsible for the moral well-being of the various populations there, and governors were instructed to support them in their efforts. Therefore, given the scientific tradition that had been established by Catholic mission orders in the sixteenth century and the continuing supply of talented personnel available to these same orders in the seventeenth century, there was an altogether greater chance that areas of the Atlantic World dominated by Catholics would be reported upon scientifically than was the case in the areas that fell under Protestant control. Given the link between scientific study and missionary endeavour there was therefore also a greater chance that more systematic efforts would be made to evangelise all the populations residing within the areas dominated by Catholics.

III

While the conclusions reached through this particular comparison go some way to explain why the ambition to make the Atlantic World a Protestant space proved to be unattainable during the early modern centuries, it is possible from wider reading to venture some general observations on the difficulties encountered by all European authorities in their effort to promote benevolent colonisation during the early modern period. The first is that, regardless of nationality or religious confession, the primary ambition of the overwhelming majority of people who then participated in colonisation ventures was to seek personal enrichment and social advancement in complete disregard of the human or environmental disasters that might result from such ambitions. Our second conclusion is that such raw pursuit of profit was curbed, or channelled to more lofty purpose, only in those cases where social and moral critics could act independently of the leaders within the colonies and alert the relevant government authorities in Europe to the injustices being perpetrated in their name. Thirdly, when leaders in Europe responded positively to such calls to curtail injustice against the weak, their concerns could result in ameliorative action only where the particular European government had previously established some semblance of authority to enforce its wishes in the colonies. And even then, European governmental and ecclesiastical authorities had concluded from an early stage that they could provide for the protection and the evangelisation of the populations included within what they came to regard as their jurisdictions only where these people had been drawn into a polity or economy that appeared reasonable to

Europeans, after the principle that people had first to be brought into a civil frame of government before they could be made Christian. This latter consideration explains the insistence that the comprehensive study of the natural resources that might sustain European interest in a region should be part and parcel of the drive to comprehend, and ultimately evangelise, the populations of that region. On a particular level, this consideration explains why, with the passage of time, the French Dominicans in the West Indies began to concentrate on the evangelisation of the European and African populations on their islands, and to abandon their previous effort to convert the Native American population because these stubbornly retained their own polity and seemed ready to mobilise their resources by sea from neighbouring islands and seek to expel the French settler community from the Antilles.

If, over the course of time, Europeans who cared about such matters were agreed upon a sequence of steps that were necessary to successful evangelisation, it is apparent that, by the onset of the seventeenth century (and then after more than a century of trial and error), the Iberian powers were better informed than any other European governments of what was happening in their particular colonies and, were also better able than any others to enforce their will within each of their Atlantic possessions. This was so because they had been the first to develop and maintain ecclesiastical, legal and administrative instruments of government in their major colonies. Of the late starters in Atlantic colonisation, only the French came near to matching what the Spaniards and Portuguese had attained in this respect, and they also made most progress as evangelisers because only they consistently sought to emulate what had been established as best practice by the Iberians. Thus the French reformers in the West Indies, like their counterparts in Canada, contributed to making the Atlantic World more a Catholic than a Protestant place even if they, like the Iberians before them, had to accept that what was resulting from their missionary endeavours was a hybridised form of Catholicism that had to accommodate many of the practices that their converts had brought with them from the belief systems that had previously provided meaning to their lives.[79]

[79] There is a vast and growing literature on the development of hybridised religions in the Americas; for a brief introduction see Kenneth Mills, 'Religion in the Atlantic World', in Nicholas Canny and Philip Morgan (eds.), *The Oxford Handbook of the Atlantic World, 1450–1850* (Oxford, 2011), pp. 433–48.

Note. The research that led to this paper was begun in the spring of 2005 when I was professeur invité at the École des Hautes Études, Paris, and I continued it in 2005–6 as Parnell Senior Research Fellow at Magdalene College, Cambridge. Thereafter, until March 2011 my life was dedicated principally to enabling other scholars in Ireland to pursue their research, and I am especially grateful to the British Academy for the invitation to be the Raleigh lecturer for 2011 since this served to rehabilitate me as a working historian. I would like to thank those who attended the Raleigh Lecture at the British Academy on 22 November 2011 for their helpful suggestions and comments, and I am especially grateful to Dame Janet Nelson who presided on that occasion and was everything a perfect host should be. I am grateful also to those scholars who attended seminars at Northwestern University, the University of Notre Dame, New York University and the European University Institute for criticising subsequent versions as they evolved. I am especially grateful to Michiel van Groesen who directed me to the publications of Willem Piso and George Marggraf. The University of Notre Dame invited me for the spring semester of 2012 to be the first holder of their Herbert Allen and Donald R. Keough Distinguished Visiting Professorship. This provided me both with access to the special collections of the Hesburgh Library, and a perfect environment in which to rethink the lecture for publication.