

Contents lists available at [SciVerse ScienceDirect](http://www.sciencedirect.com)

Studies in History and Philosophy of Biological and Biomedical Sciences

journal homepage: www.elsevier.com/locate/shpsc

“My appointment received the sanction of the Admiralty”: Why Charles Darwin really was the naturalist on HMS *Beagle*

John van Wyhe

National University of Singapore, 14 Science Drive 4, Singapore 117543, Singapore

ARTICLE INFO

Article history:

Received 20 October 2012

Received in revised form 15 March 2013

Available online xxxx

Keywords:

Charles Darwin

Naturalist

HMS *Beagle*

ABSTRACT

For decades historians of science and science writers in general have maintained that Charles Darwin was not the ‘naturalist’ or ‘official naturalist’ during the 1831–1836 surveying voyage of HMS *Beagle* but instead Captain Robert FitzRoy’s ‘companion’, ‘gentleman companion’ or ‘dining companion’. That is, Darwin was primarily the captain’s social companion and only secondarily and unofficially naturalist. Instead, it is usually maintained, the ship’s surgeon Robert McCormick was the official naturalist because this was the default or official practice at the time. Although these views have been repeated in countless accounts of Darwin’s life, this essay aims to show that they are incorrect.

© 2013 Elsevier Ltd. All rights reserved.

When citing this paper, please use the full journal title *Studies in History and Philosophy of Biological and Biomedical Sciences*

1. Introduction

The voyage of the *Beagle* remains one of the most important and famous scientific expeditions in history. Yet recent historians and science writers in general are unanimous that the most famous member of the expedition, Charles Darwin, was not in fact the official naturalist to the expedition, but instead the captain’s companion. This essay will demonstrate why this view is incorrect.

Most historians of science will be highly suspicious of the argument of this essay. The ‘companion’ interpretation is held to be an established correction to old-fashioned historical narratives. All trainee historians of science are taught a number of these corrections, in this case the once traditional view that Darwin was simply the *Beagle*’s naturalist. Another example is the traditional belief that Darwin discovered evolution while in the Galapagos islands when he observed the beaks of the finches. All historians of nineteenth-century science now know this view was refuted by Frank Sulloway.¹ Hence in seeking to contradict

one of these field-defining refutations I anticipate my readers will be more than a little sceptical. The ‘companion’ interpretation has, after all, opened up the history of the *Beagle* voyage and Darwin’s biography to more socially informed and contextually enriched analyses.

My belief in the ‘companion’ view, which I have long subscribed to like other Darwin scholars, was shaken by the careful analysis and arguments in Keith Thompson’s book *HMS Beagle*.² During subsequent research on the *Beagle* voyage³ I was puzzled by the quantity and consistency of primary documents which referred to and treated Darwin as the naturalist on the *Beagle*. The discrepancy between the primary documents and modern historiography spurred me to investigate these issues further. As so often the surviving evidence is incomplete and has to be carefully sifted in order to wrest from it an answer to a question never imagined by the historical actors. Thompson’s objections to the ‘companion’ view can be further strengthened. And, as the ‘companion’ view continues to be repeated without question throughout the voluminous scholarly and popular literature on Darwin, a dedicated re-analysis of the question is long overdue.

E-mail address: dbsjmvw@nus.edu.sg

¹ Sulloway (1982).

² Thomson (1995).

³ van Wyhe (2002) and Chancellor & van Wyhe (2009).

2. How Darwin became ‘unofficial’ naturalist

In the earliest literature Darwin was referred to as the *Beagle*’s ‘naturalist’. Most famously, *The origin of species* (1859) opens with the words ‘When on board H.M.S. ‘Beagle,’ as naturalist. . .’.⁴ In his *Autobiography*, first published in expurgated form in 1887, Darwin wrote ‘I joined the *Beagle* as naturalist’ and ‘On returning home from my short geological tour in North Wales, I found a letter from Henslow, informing me that Captain Fitz-Roy was willing to give up part of his own cabin to any young man who would volunteer to go with him without pay as naturalist to the Voyage of the *Beagle*.’⁵ Also in *Life and letters* (1887) Francis Darwin wrote ‘...[Darwin] received the offer of appointment as Naturalist to the *Beagle*.’⁶ In the 1940s Nora Barlow, in her pioneering work on the voyage, wrote ‘The story of how Charles Darwin came to be entered on the books of H.M.S. *Beagle* as naturalist on the long voyage of circumnavigation has often been told.’⁷

The first reference to Darwin as ‘official naturalist’ in print was at least as early as 1914 though the phrase did not become at all common until the 1950s.⁸ The advent of Darwin as ‘unofficial naturalist’ came in a 1969 article by Jacob W. Gruber. Gruber’s article deserves closer scrutiny to see how this significant change of historical interpretation was established. Gruber argued that: ‘... Darwin was not, in fact, the only naturalist to the *Beagle*; that he was a kind of functional ‘supercargo’ whose ultimate contributions far exceeded any prior expectations; and that the position of naturalist was initially filled, and probably officially, by the expedition’s surgeon, Robert McCormick who, in assuming the position, was acting within a developing tradition of governmentally sponsored scientific research.’⁹

Gruber used the term ‘unofficial’ naturalist to describe Darwin. However the only evidence Gruber provided for Darwin being, in fact, ‘unofficial’ was the long-overlooked possibility that the ship’s surgeon, Robert McCormick (1800–1890), might have been the official naturalist because of a ‘developing tradition’, until McCormick left the expedition in April 1832. Gruber argued that it was normally the case in the early nineteenth century that a ship’s surgeon was the official naturalist. Hence, by this reasoning, McCormick, and not Darwin, was the official naturalist on the *Beagle*. Gruber concluded that ‘Darwin’s position on board the *Beagle*, then, was essentially that of a private passenger and companion to the Captain whose presence had official sanction, but whose role was an anomalous one.’¹⁰ Since Gruber’s article, and on its authority, McCormick is routinely referred to as the ‘official naturalist’ of the *Beagle*.¹¹

However what remained unsubstantiated by Gruber and subsequent writers is this: if the ship’s surgeon was *normally* the naturalist, was this specifically the case on the *Beagle* or not? Clearly so specific a conclusion as to whether McCormick or Darwin was *the* naturalist must have more evidence than a generalization about what was normally the case. To my knowledge no evidence

has been presented that McCormick actually was, at any stage, termed the naturalist on the *Beagle*. In fact, it will be shown below that even the general statement that a ship’s surgeon was by default the official naturalist, despite many repetitions by historians of science, is simply incorrect. It is correct to say that a ship’s surgeon was *often* the naturalist, but this was by no means the default position or Admiralty policy as will be shown below.

Indeed there are good reasons to conclude that McCormick was *not* the *Beagle*’s naturalist. Captain FitzRoy, in a 16 November 1837 letter of remonstrance to Darwin after the voyage for not acknowledging the generous assistance of the officers of the *Beagle*, reminded Darwin: ‘Perhaps you are not aware that the ship which carried us safely was the first employed in exploring and surveying whose Officers were not ordered to collect—and were therefore at liberty to keep the best of all—nay, all their specimens for themselves.’¹² That is, according to FitzRoy, the *Beagle*’s orders were unique in that no officer, which includes the surgeon, was ordered to collect natural history specimens. Why did the *Beagle* have such unique orders? It seems plausible that it was because the Admiralty sanctioned Darwin to travel in the capacity of naturalist (see below). Furthermore, the particular terms of Darwin’s appointment may explain why he was not specifically named in the ship’s instructions.¹³

Secondly, McCormick’s replacement as surgeon, Benjamin Bynoe (1804–1865) was never and is never referred to as the ‘official’ naturalist and no evidence has been found to suggest that he was. Yet if McCormick was the official surgeon-naturalist why would not his successor to the post of surgeon also be the official naturalist? The surgeons on the ships *Adventure* and *Beagle* on the first voyage (1826–1830), J. Tarn and E. Bowen, were also not called naturalists. Also aboard the *Adventure* was J. Anderson a ‘Botanical Collector’.¹⁴ So there were two ship’s surgeons on the first voyage of the *Beagle* and two ship’s surgeons during her second voyage never referred to as naturalists, though clearly they and other officers made natural history collections.

Several writers have argued that McCormick’s interest in natural history collecting shows that he was or believed himself to be the ‘official’ naturalist of the voyage.¹⁵ It is important to stress that no historical evidence referring to McCormick as the naturalist has ever been presented. Natural history collecting on the *Beagle* was not limited to surgeons or Darwin. In addition to Darwin, we know that FitzRoy, Bynoe, Lieutenant Bartholomew James Sullivan, Assistant surgeon William Kent, Darwin’s servant Syms Covington, FitzRoy’s personal steward Harry Fuller, ship’s clerk Edward Hellyer and probably other officers and crew made natural history collections.¹⁶

FitzRoy recollected that it was during the first voyage (on board a ship with a surgeon) that he experienced the following desideratum:

There may be metal in many of the Fuegian mountains, and I much regret that no person in the vessel was skilled in mineralogy, or at all acquainted with geology. It is a pity that so good

⁴ Darwin (1859). All of the works of Darwin, FitzRoy and some others cited here are reproduced on *Darwin Online* edited by van Wyhe (2002).

⁵ Darwin (1887, Vol. 1, pp. 45, 58–59).

⁶ Darwin (1887, Vol. 1, p. 190).

⁷ Barlow (1945, p. 24). See also Barlow (1958, p. 226).

⁸ ‘The expedition was declared to be “entirely for scientific purposes,” and Charles Darwin sailed on board as official “Naturalist”.’ Dampier & Dampier (1912, p. 194). See also Ayres (1932, p. 33) and Atkins (1976, p. 18).

⁹ Gruber (1969, p. 266).

¹⁰ Gruber (1969, p. 270).

¹¹ See for example Brent (1981, p. 362), Desmond & Moore (1992, p. 110), Thomson (1995, p. 138), Browne (1995, p. 203), Camerini (1997, p. 361), Livingstone (1997, p. 30), Ghiselin (2009, p. 98) and Steel (2011).

¹² Burkhardt et al. (1985) (hereafter CCD), 2:58.

¹³ The instructions for the voyage are printed in FitzRoy (1839, Vol. 2, pp. 22–40).

¹⁴ King (1839, Vol. 1, p. xii).

¹⁵ Some of the most detailed accounts are Stanbury (1982) and Browne (1995).

¹⁶ Porter (1985, p. 979). For Kent see: Darwin (1834) in van Wyhe (2002).

an opportunity of ascertaining the nature of the rocks and earths of these regions should have been almost lost.

'I could not avoid often thinking of the talent and experience required for such scientific researches, of which we were wholly destitute; and inwardly resolving, that if ever I left England again on a similar expedition, I would endeavour to carry out a person qualified to examine the land; while the officers, and myself, would attend to hydrography.'¹⁷

If FitzRoy felt this need in the presence of a ship's surgeon (or surgeon-naturalist) then surely the role he envisioned, and later filled by Darwin, was for someone more highly trained than a ship's surgeon or a 'mere collector' (more on this below). Secondly, FitzRoy envisioned someone who would remain largely ashore while the officers, including surgeon, would remain afloat intent on their responsibilities. Thirdly, Darwin was highly qualified to study geology, McCormick was not. There can be no doubt that FitzRoy found 'a person qualified to examine the land'.¹⁸ Darwin spent the majority of the voyage ashore, naturalizing.¹⁹

Gruber also suggested that McCormick's premature departure from the *Beagle* in April 1832 was the result of McCormick's purported unhappiness at the usurpation of his role of naturalist by Darwin. This too has been widely repeated in the literature.²⁰ Many writers seem to feel sympathetic for the apparent underdog, McCormick, vis-à-vis the privileged, upper-class Darwin. Privileged Darwin certainly was, but this cannot be evidence for McCormick being the default or de facto naturalist on the *Beagle*—or even that McCormick believed he was the official naturalist. It is a matter of currently prevailing interpretation that McCormick had any feelings whatever regarding Darwin's position on the ship, although it is certainly plausible. But there is no unambiguous evidence to support it.

The only evidence yet brought forward for McCormick's views are his recollections, published fifty-two years later, after Darwin's subsequent fame as the *Beagle*'s naturalist and author of *Origin of species*: 'Having found myself in a false position on board a small and very uncomfortable vessel, and very much disappointed in my expectations of carrying out my natural history pursuits, every obstacle having been placed in the way of my getting on shore and making collections, I got permission from the admiral in command of the station here to be superseded and allowed a passage home in H.M.S. *Tyne*.'²¹ Historians are usually more cautious in accepting retrospective views as identical to those held many years before. This recollection is commonly cited as evidence that McCormick believed he was the 'official' naturalist. Yet McCormick does not say that he believed himself to be the naturalist, merely that his getting ashore was not facilitated. What he meant by 'false position' could mean a number of things, such as that he thought he would be free to go ashore and collect when at anchor, and obstacles placed in his way could be his own perspective on disagreements over the restraints expected by FitzRoy of a surgeon according to the proscribed duties of a surgeon by the Navy. McCormick frequently turned down positions offered to him and invalidated out of multiple voyages as a result of his cantankerous personality—and these refusals and premature

departures are an essential context to appreciating his departure from the *Beagle*.²² Cited alone, McCormick's departure from the *Beagle* sounds misleadingly as if it were unique—and this unique departure seems to be explained by the unfair usurpation of the naturalist role by the captain's gentleman companion. However, in a contemporary account from April 1832, Darwin attributed McCormick's departure to 'being disagreeable to the Captain & Wickham—He is no loss.'²³

Another interpretation of McCormick's version of his departure from the *Beagle* voyage (which he did not even specifically name) could be to save face considering the widely celebrated success of Darwin's researches on that voyage. Since McCormick abandoned the voyage at the beginning, he deprived himself of further collecting opportunities around the globe. There would have been, for example, countless opportunities for McCormick to study marine life when Darwin was absent on long stays ashore and it is obvious from the many collecting opportunities other officers found during the voyage that McCormick could have made much of a five year voyage on the *Beagle* whether or not he could travel as freely as Darwin.

3. Officialdom

Another important point to observe is the anachronistic use of the term 'official' in the scholarly literature on the *Beagle* voyage. The term was not used at the time to refer to anyone on the *Beagle* such as FitzRoy as the official commander, McCormick as the official surgeon and so forth. In fact the only time the word official is used in the primary documents associated with this question which I have found refers to Darwin. It occurs in the letter from the Cambridge mathematician and Trinity Fellow George Peacock to Darwin: 'they will furnish you with an official appointment!'²⁴ Nevertheless, there is of course no point in laying stress on this remark as establishing that Darwin was the official naturalist.

Another anomaly is the way two other supernumeraries on FitzRoy's list in the *Narrative* of the voyage are referred to in the literature. Augustus Earle and later Conrad Martens travelled on the *Beagle* as 'Draughtsman',²⁵ the term almost always converted in the modern literature to 'artist'. Ironically these men are routinely referred to as 'official artist'²⁶ in modern historiography—yet they were, like Darwin, not in the Navy, aboard at the invitation of FitzRoy, and with the sanction of the Admiralty. Why should they be 'official artists' and Darwin not the 'official naturalist' when their appointments and circumstances are virtually identical? One difference which distinguishes them is that the artists were paid a salary by FitzRoy. This made them in effect FitzRoy's servants, as FitzRoy's 'own steward: and Mr. Darwin's servant' were also listed as supernumeraries in FitzRoy's list of the ship's complement.²⁷

At one point during the negotiations for his position Darwin was offered a salary. Having no financial need, Darwin was suspicious that a salary might prejudice his case for controlling his collection, despite assurances that this would have no bearing on the

¹⁷ In King (1836, p. 385).

¹⁸ On Darwin's geological work during the voyage see Herbert (2005).

¹⁹ Rookmaaker (2009) in van Wyhe (2002), shows, for the first time, that Darwin spent 580 nights or 33.3% of the voyage at sea.

²⁰ E.g. Gould (1977, p. 31) and Browne & Neve (1989).

²¹ McCormick (1884, Vol. 2, p. 222). See CCD 1: 225–7.

²² See Keevil (1943).

²³ Darwin to Caroline Darwin 25–26 April [1832] CCD1:225. See Janet Browne's more detailed treatment of McCormick in Browne (1995, pp. 70, 202–210).

²⁴ Peacock to Darwin [c. 26 August 1831] CCD1:130.

²⁵ FitzRoy (1839, Vol. 2, p. 20).

²⁶ Moorehead (1969, p. 109), Keynes (1984, pp. 4, 207) and de Vries-Evans (1993, p. 38); CCD10: 36; Armstrong (2004) 'official artist' p. 173. Also common is 'ship's artist' Bowlby (1990, p. 134), Desmond & Moore (1992, p. 122) and Browne (1995, pp. 199, 265).

²⁷ FitzRoy (1839, Vol. 2, pp. 19–21).

matter. This is one of the most inexplicable problems with the current interpretation of Darwin as ‘companion’. If Darwin was offered a position as a private companion to the captain, why would he worry so much that the Admiralty would have control over the eventual disposal of his collection or whether it would be considered government property?²⁸ And is there any precedent of a social companion being given a salary by the Admiralty? Indeed Darwin was expected, practically required, to dispose of his natural history collections to ‘some public body, as Zoological & Geological &c.’²⁹ Such facts make sense only if Darwin was offered the position of naturalist and not companion.

A 15 September 1831 letter from FitzRoy to the Hydrographer of the Navy Francis Beaufort (1774–1857) makes a clearer distinction: ‘He [Darwin], Captain King and I now think that it would be better in many respects, that he should *not* be on the *Books*, but that he should go out in a strictly *private* capacity. I am, however, *equally* ready to receive him in *either* manner, and I have recommended his asking which plan meets *your* approbation.’³⁰ FitzRoy later reported in his narrative of the voyage:

An offer was made to Mr. Darwin to be my guest on board, which he accepted conditionally; permission was obtained for his embarkation, and an order given by the Admiralty that he should be borne on the ship’s books for provisions. The conditions asked by Mr. Darwin were, that he should be at liberty to leave the *Beagle* and retire from the Expedition when he thought proper, and that he should pay a fair share of the expenses of my table.³¹

Hence, according to the language used by FitzRoy, Darwin was aboard not ‘in a strictly private capacity’ as he was on the ship’s books for victuals (worth £40 per annum). Darwin was both FitzRoy’s guest and aboard in a capacity not strictly private.

4. What were the orders?

Some of the most decisive documents for these questions are the orders issued to the ship’s commander by the Admiralty and the Hydrographer. During the *Beagle* and *Adventure*’s first voyage in 1826–1830 the instructions read: ‘You are to avail yourself of every opportunity of collecting and preserving Specimens of such objects of Natural History as may be new, rare, or interesting; and you are to instruct Captain Stokes, and all the other Officers, to use their best diligence in increasing the Collections in each ship: the whole of which must be understood to belong to the Public.’³² No officer was ordered to be or termed naturalist, including the surgeons. The wording of the entire paragraph from which this is extracted is identical to that issued to captain William E. Parry for the 1825–1826 arctic voyage to discover a northwest passage.³³ The ship’s surgeon on Parry’s expedition was specifically mentioned:

‘The knowledge which Doctor Neill, surgeon of the *Hecla*, has been represented to us to possess in this department of science, will be of material service to you in arranging the collections of, and making notes upon, the various subjects of natural history.’³⁴ The orders mention this about Neill not because he was a ship’s surgeon, but because he was known to be particularly knowledgeable in natural history. Neill was titled surgeon and never referred to in the voyage narrative as naturalist. And yet Parry acknowledged Neill thus: ‘To the zeal and industry of Dr. [Samuel] Neill, who entirely superintended the public collection of specimens of Natural History, and has furnished a variety of important geological notices, the public are very highly indebted.’³⁵

The instructions for the second voyage of the *Beagle* (Darwin’s) were dated 11 November 1831—that is about two months after Darwin accepted the offer. The instructions make no mention of natural history collecting. Neither Darwin, who was free to leave the voyage at any time he chose, nor anyone else, was referred to as naturalist. The instructions for the *Beagle*’s third surveying voyage (1837–1843) to Australia, barely mention collecting. The surgeon and assistant surgeon were again not referred to as naturalists. The instructions did briefly mention the medical officers:

Large collections of natural history cannot be expected, nor any connected account of the structure or geological arrangements of the great islands which you are to coast; nor, indeed, would minute inquiries on these subjects be at all consistent with the true objects of the survey. But, to an observant eye, some facts will unavoidably present themselves, which will be well worth recording, and the medical officers will, no doubt, be anxious to contribute their share to the scientific character of the survey.³⁶

Here again the medical officers are not ordered to or responsible for collecting, but it is recognized that they are likely to be keen to do so.

Perhaps most importantly of all, the duties of ships’ surgeons in the Royal Navy were detailed in the successive editions of *Regulations and instructions relating to His Majesty’s service at sea*, published since 1733. The section for ship’s surgeons in the editions preceding the *Beagle* voyage, including the most recent of 1826, makes no mention of naturalists, natural history or collecting duties of any kind but instead details exclusively medical responsibilities.³⁷

5. How Darwin became FitzRoy’s ‘companion’

Another major element that has changed in Darwin historiography is that Darwin is now commonly referred to as something other than ‘naturalist’, namely as FitzRoy’s ‘companion’,³⁸ ‘gentle-

²⁸ See the letters in CCD1 which contain lengthy discussions of this concern.

²⁹ Darwin to J. S. Henslow 9 [September 1831] CCD1:149.

³⁰ Cited in Francis Darwin (1912, p. 547).

³¹ FitzRoy (1839, Vol. 2, p. 19).

³² King (1839, Vol. 1, p. xvii).

³³ Parry (1826, p. 23).

³⁴ Parry (1826, p. 23).

³⁵ Parry (1826, p. 23).

³⁶ Lort Stokes (1846, Vol. 1, p. 24).

³⁷ Anonymous (1826).

³⁸ Gould (1977, p. 29), White & Gribbin (1995, p. 103) and Hodge & Radick (2003, p. 25): ‘The vessel’s young commander, Captain Robert FitzRoy, had requested a gentleman civilian companion’; CCD13, p. 136. John van Wyhe referred to Darwin as companion in the introduction to the *Beagle diary* extracts for BBC Radio 4’s Book of the Week in December 2006; Steel (2011) and Bowler (2011).

man companion³⁹ or even ‘dining companion’.⁴⁰ This view is derived primarily from a 1975 article by Harold L. Burstyn.⁴¹ Burstyn used Gruber’s 1969 article as a starting point. Since McCormick was believed to be the *Beagle*’s naturalist, what was Darwin doing on board? Burstyn argued: ‘What Robert FitzRoy wanted when he met Charles Darwin was a gentleman to help him to bear the burdens of an arduous and isolated sea command, and the study of nature, in those far-off places he was sailing to, could provide an appropriate occupation for the captain’s guest. Darwin was on board the *Beagle* to give the captain someone to relax with, someone to talk to who was wholly outside the rigid structure of naval discipline.’⁴²

The logic and evidence used to establish this contention are curiously weak for such an oft-cited article. Burstyn began with an entirely conjectural speculation: ‘FitzRoy *may* have begun to worry whether he had inherited the highly-strung character that had led his illustrious uncle Castlereagh to cut his own throat less than ten years before.’⁴³ Though certainly possible, no evidence exists that FitzRoy ever had any thought of the kind. In the very next sentences, however, Burstyn shifted to language that suggests the interpretation was fully established: ‘Facing a voyage whose hardships would test him to the utmost, FitzRoy sought some form of companionship to mitigate his isolation. If he admitted his plight to himself, then to seek a companion in the guise of a Civilian Naturalist was a useful fiction.’⁴⁴

Later in the article Burstyn presented three main reasons why he believed Darwin was really the captain’s companion.

1. The shortness of time between issuance of the invitation and expected start of the voyage.

The shortness of planning can be no evidence of the position being for a naturalist or a companion. Indeed other examples cited below show that short notice was not uncommon for a ship’s naturalist.

2. A letter from Scottish naturalist Robert Jameson to McCormick shows ‘McCormick still considered himself to be the *Beagle*’s naturalist long after Darwin had settled into the ship’.⁴⁵

But the letter shows only that McCormick planned to study natural history during the voyage. As shown above this is not evidence of the position of naturalist.

3. ‘FitzRoy... had already invited a friend to accompany him, a Mr. Chester. The virtual absence of this name from the annals of natural history suggests that FitzRoy’s offer came from his need for a companion rather than a naturalist’.⁴⁶

Burstyn here elides two offers, one purportedly made to Chester to go ‘as a friend’ by FitzRoy, and another made by FitzRoy to the Hydrographer of the Navy to find a naturalist.⁴⁷ How could the invitations to Chester and Darwin be for the same position when Beaufort’s appeal to Cambridge was sent in early August and FitzRoy only

heard that Chester was unavailable on 5 September? From this elision Burstyn concluded that the offer to Darwin was also to go as a friend. We do not know the nature of the offer to Chester, who was plausibly identified by Burstyn as ‘Harry Chester (1806–1868), novelist and youngest son of Sir Robert Chester (1768–1848) of Bush Hall, Herts., in 1831 a clerk in the Privy Council Office’.⁴⁸ Burstyn continued: ‘Our question is then: was Chester a naturalist?; and our answer: not so far as we know.’ Yet the editors of Darwin’s *Correspondence* noted ‘An inscription in volume one of a copy of Kirby and Spence 1828 [*An introduction to entomology*]... reads: ‘Harry Chester | From his valued friend Robert FitzRoy’.⁴⁹ Some writers have speculated that the offer to Chester was invented by FitzRoy in order to have a face-saving way of rejecting Darwin if he proved to be unsuitable. This is based on a letter from Darwin after speaking to FitzRoy: ‘[FitzRoy] confesses, his letter to Cambridge, was to throw cold water on the scheme.’⁵⁰

Historian Keith Thomson pointed out that the offer to Chester ‘may in fact have been left over from the private voyage planned for the hired brig *John*’.⁵¹ Before the Admiralty sanctioned the second voyage of the *Beagle* it was FitzRoy’s intention to return his natives from Tierra del Fuego at his own expense. One can well imagine taking a friend on such a relatively short journey. However it is hard to imagine a friend keen enough to be imprisoned on a ship for up to five years in order to entertain a captain friend during his off duty hours.

6. FitzRoy’s psychology

It is often reported that FitzRoy worried about his psychological health or sanity during the forthcoming voyage and, in some accounts, even feared he might turn suicidal like his uncle Lord Castlereagh (1769–1822) or the previous captain of the *Beagle* Pringle Stokes (d. 1828). This contention is rendered more probable by the fact that FitzRoy actually did commit suicide in 1865. Although it is a reasonable hypothesis, no evidence that FitzRoy entertained any idea of the kind has ever been presented. Yet despite this it is widely repeated as a fact in accounts of the *Beagle* voyage. Unfortunately frequent repetition has lent it an air of historical fact that it does not deserve.

7. ‘More as a companion than a mere collector’

The most convincing piece of evidence that Darwin was ‘companion’ rather than ‘naturalist’ is an oft-quoted⁵² letter from Cambridge professor of botany John Stevens Henslow to Darwin:

... I have been asked by Peacock who will read & forward this to you from London to recommend him a naturalist as companion to Capt Fitzroy employed by Government to survey the S.

³⁹ ‘Fitzroy, wanted a gentleman-companion to relieve the monotony of the voyage—hence the excuse for inviting a naturalist who could describe the areas visited (Gruber, 1969; Burstyn, 1975).’ Bowler (1984, p. 148); ‘Gruber and Burstyn disposed of Darwin as the *Beagle*’s official naturalist (he was the captain’s gentleman companion)’ Desmond, Browne, & Moore (2004) and Browne (1995, pp. 345, 369); ‘Darwin was not the *Beagle*’s official naturalist.’ Endersby (2006, p. 215); and ‘Darwin was not, in fact, the official naturalist aboard the *Beagle*’ Endersby (2009, p. 215); ‘Darwin started as a kind of gentleman companion to the captain, Robert Fitzroy’. Ruse (2009, p. 2) and Bowler (2011).

⁴⁰ Desmond & Moore (1992), Browne (1995) and Desmond & Moore (2009, p. 72); ‘Thus Darwin’s role on board was primarily social, as a dining companion for FitzRoy.’ Steel (2011). Other authors have referred to Darwin as both ‘naturalist and captain’s companion’ e.g. Brent (1981, p. 2) and Bowlby (1990, p. 120).

⁴¹ Burstyn (1975, pp. 62–69).

⁴² Burstyn (1975, p. 69).

⁴³ Burstyn (1975, p. 64). Italics mine.

⁴⁴ Burstyn (1975, p. 65).

⁴⁵ Burstyn (1975, p. 65).

⁴⁶ Burstyn (1975, p. 66).

⁴⁷ Darwin to J. S. Henslow [5 September 1831] CCD1:142.

⁴⁸ Burstyn (1975, p. 66).

⁴⁹ CCD1:143.

⁵⁰ Darwin to Susan Darwin [9 September 1831] CCD1:146.

⁵¹ Thomson (1995, p. 140).

⁵² For example Brent (1981, p. 107), Bowlby (1990, p. 109), Browne (1995, p. 145) and Desmond et al. (2004).

extremity of America—I have stated that I consider you to be the best qualified person I know of who is likely to undertake such a situation—I state this not on the supposition of *y*^r being a *finished* Naturalist, but as amply qualified for collecting, observing, & noting anything worthy to be noted in Natural History. Peacock has the appointment at his disposal & if he cannot find a man willing to take the office, the opportunity will probably be lost—Capt. F. wants a man (I understand) more as a companion than a mere collector & would not take any one however good a Naturalist who was not recommended to him likewise as a *gentleman*.⁵³

In his outstanding book *HMS Beagle* Keith Thomson was, apparently, the first to argue that the letters are not evidence for the ‘companion’ view:

These are the letters that have been interpreted as evidence that Fitzroy really was looking first and foremost for a companion. Yet I believe the evidence points in exactly the opposite direction. Not only was the position first offered to the Reverend Leonard Jenyns, but Darwin states that Henslow wanted to go himself... Fitzroy would hardly have given the choice of a pure companion to his superior Beaufort to pass off among the latter’s friends at Cambridge. Beaufort himself evidently had no thought of the appointment’s being ‘more as a companion.’ It is out of the question that the reverends Jenyns or Henslow would have seriously considered the position of ‘companion’ to a ship’s captain at least twenty years their junior... The most difficult phrase in all the letters is Henslow’s: ‘more as a companion than as a mere collector.’ This does indeed seem to be a straightforward indictment. But Henslow was merely rephrasing Peacock’s letter. Both letters by Peacock and Beaufort’s letter to Fitzroy stress the scientific nature of the quest... The crux of the matter, which has hitherto been overlooked, is that in the state of society and natural science at that date there were basically two classes of person who might have been attracted to and qualified for the post of naturalist. The first was the working ‘collector,’... The other class was exemplified by gentleman naturalists... [Peacock and Henslow] are not going out of their way to explain to the innocent Darwin that he would be expected to be a companion first and a naturalist on the side. They are, on the contrary, trying to reassure the wellborn Darwin (and his even more socially conscious father) that as an independent naturalist he would be treated fully as a gentleman.⁵⁴

Henslow and Jenyns were qualified naturalists. Information kindly sent to me (personal communication) by Sean Karley and Jeff Oller-ton suggests that Darwin’s fellow student at Cambridge, the botanist John Downes may also have been considered for the offer of naturalist on the *Beagle*. After these two and possibly three naturalists, the offer was passed to Darwin. Darwin had, after all, studied medicine for two years at the University of Edinburgh, as well as chemistry, geology and marine biology and later at Cambridge he studied botany, entomology and geology. There can be no doubt that, as Thomson wrote, Darwin ‘was actually an extraordinarily well-trained natural scientist.’⁵⁵

The Henslow remark ‘more as a companion than as a mere collector’ has been interpreted as companion *or* naturalist. But the point Henslow was distinguishing was in fact naturalist *or* collector. A writer in *The Edinburgh review* in 1812 made this distinction: ‘The cultivators of Natural History, like the objects they consider, admit of classification into genera and species, which hold very different stations in philosophical science. We must place in the lowest rank, the mere collector of specimens...’ contrasted by ‘The superior classes of naturalists’.⁵⁶ In a review of some of Darwin’s favourite Cambridge reading, J. F. Stephens *Illustrations of British entomology*, probably by the entomologist John Barlow Burton, we read: ‘But the mere collector is not and cannot be justly considered as a naturalist’.⁵⁷

8. What was a ship’s naturalist?

The practice of carrying naturalists on naval ships was long established. On James Cook’s first voyage to observe the transit of Venus in Tahiti (1768–1771) he was accompanied by Joseph Banks and Daniel Carol Solander. Probably the most inspiring naturalist model for Darwin was Alexander von Humboldt who travelled extensively through South and Central America between 1799 and 1804. While a student at Cambridge Darwin was transported with delight by Humboldt’s romantic travel narrative.⁵⁸ However, although Humboldt was a gentleman naturalist, his explorations were not tied to a government ship or expedition.

During the early decades of the nineteenth century ‘naturalist’ was an informal title for which there was no set qualification or requirement. In Britain it was not a professional title, but rather a description of specialized interest, experience or reputation, as was antiquarian. A dictionary of the period defined a naturalist simply as ‘A student in physicks, or natural philosophy’.⁵⁹ In terms of ships’ naturalists or surgeon-naturalists a wide range of names and positions was clearly used with no clear consensus or firm definition. A ship’s naturalist could be paid or unpaid, be a government official, member of the Navy or a private individual. Sometimes they were named in a ship’s orders, and sometimes not. A brief survey of other expedition naturalists will demonstrate the context in which to place the *Beagle*’s naturalist.

8.1. Surgeon-naturalists

The naval surgeon Clarke Abel, who accompanied Lord Amherst on his trip to China in 1816–1817 on board HMS *Embassy*, was referred to as the ‘naturalist’. In Abel’s case his appointment as surgeon was supplemented with an additional appointment as ‘naturalist’. As recalled in Abel’s *Narrative*: ‘My appointment to the [ship] Embassy was at first simply medical; but through the recommendation of Sir Joseph Banks to the East India Company, I was permitted to take up me the office of Naturalist, and receive an ample outfit of all the apparatus for scientific research.’⁶⁰

In the narrative of the 1826–1827 voyage of the East India Company’s surveying vessel *Research*, captain Peter Dillon recalled:

I then recommended that a surgeon, naturalist, draughtsman, and botanist, should be attached to the expedition, for the purpose of obtaining all the knowledge possible relative to the character of these unfrequented islands and their inhabitants;

⁵³ Henslow to Darwin 24 August 1831 CCD1:128–9.

⁵⁴ Thomson (1995, pp. 142–144). See discussion of the naturalist vs. companion issues in Thomson (1995, pp. 137–149).

⁵⁵ Thomson (1995, p. 144).

⁵⁶ Anonymous (1812, p. 144).

⁵⁷ Burton (1828, p. 370). The same was repeated in Burton (1837, p. 47). Thomson (1995, pp. 143–144) also makes this point.

⁵⁸ von Humboldt (1814–1829).

⁵⁹ Johnson, Walker, & Jameson (1827, p. 486).

⁶⁰ Abel (1818, p. vi).

and observed, that if an individual could be procured (such as Doctor Walich...) who understood the science of surgery as well as natural history and botany, it would be a great saving in the outfit of the expedition. I therefore ventured to propose my new friend and acquaintance, Doctor Tytler, to fill the above situation, as he had given me to understand that he was perfectly well acquainted with all the above sciences.⁶¹

Tytler, as a gentleman and highly qualified individual, was also offered a place at the captain's table.⁶² A letter to Tytler refers to his position as 'naturalist and medical officer attached to the expedition' but he was also salaried and informed that he was under the command of the captain.⁶³ But, reminiscent of McCormick, personal differences soon removed Tytler from the expedition.

Similarly the Scottish physician John Richardson (1787–1865) 'offered his services as Naturalist and Surgeon' to his friend Sir John Franklin on a second expedition to find a northwest passage of 1825–1827.⁶⁴ Richardson was a gentleman and not only a medical doctor and friend of the captain but also a Fellow of the Royal and Linnean Societies. Like Darwin, Richardson was clearly of far higher social status than a naval surgeon and presumably shared the captain's table. Richardson was named and given specific duties in the official instructions in the *Narrative* and was referred to as 'surgeon and naturalist to the expedition'.⁶⁵

Richard King was appointed to the paid position of 'surgeon and naturalist to the expedition' to the Arctic led by George Back (1833–1835) concurrent with the *Beagle* voyage.⁶⁶ On other occasions King was referred to only as 'surgeon to the expedition'.⁶⁷ Captain Back referred to King as 'my companion' numerous times in the narrative of the expedition. So being referred to as a companion need not be an alternative to expedition naturalist.

In other instances ships' surgeons acted also as naturalists but were titled only surgeon. The 1828–1831 voyage to the South Atlantic aboard HMS *Chanticleer* under Captain Henry Foster carried William Henry Bayley Webster who was titled 'surgeon of the sloop' on the title page of his own narrative of the voyage.⁶⁸ Although acting as a naturalist and recording a wide range of natural history phenomena he did not call himself 'naturalist' in his narrative.

8.2. Paid civilians

The 1825–1828 voyage to the Pacific and Bering Strait in HMS *Blossom* under Captain Beechey carried a civilian naturalist. The ship's instructions read: 'As we have appointed Mr. [George] Tradescant Lay as naturalist on the voyage, and some of your officers are acquainted with certain branches of natural history...' and elsewhere referred to Lay as 'the naturalist to the expedition'. The instructions also required that 'two specimens at least ... are to

be reserved for the public museums; after which the naturalist and officers will be at liberty to collect for themselves'.⁶⁹ The geologist Joseph Beete Jukes sailed as 'naturalist' aboard HMS *Fly* during her 1842–1846 surveying expedition to the South Pacific.⁷⁰ According to naval historian Randolph Cock, Jukes was paid a salary by the Navy. Other civilian ships' naturalists paid a salary by the Navy identified by Cock were Allan Cunningham, Thomas Edmondston, Berthold Seemann, John MacGillivray, George Barclay and J. W. Hamilton.⁷¹

8.3. Unpaid civilians

Other ships' naturalists were unpaid civilians. The ill-fated 1816 expedition to explore the river Congo in HMS *Congo* under captain James Kingston Tuckey carried three 'scientific gentlemen' who, like Darwin, were listed in the narrative of the voyage separately from the ship's officers on a 'A supernumerary list' including a 'Botanist', 'Collector of Objects of Natural History', 'Comparative Anatomist' and 'Mr. Lockhart, from His Majesty's Garden at Kew'. Like Darwin they were on the books for victuals only and did not receive salaries.⁷² They were also referred to in the expedition narrative as 'the naturalists'. The surgeon was not.⁷³

An almost identical case to Darwin's was the position for a 'savant' to accompany Captain Richard Copeland's surveying expedition to the eastern Mediterranean in HMS *Beacon* (1832–1835). As with the position filled by Darwin, the Hydrographer Beaufort wrote to Peacock at Cambridge University seeking a qualified person of appropriate social standing. The position went to the classicist and Fellow of Trinity College Robert Pashley (1805–1859). Pashley's case is well-described in Cock's valuable PhD thesis.⁷⁴ Elsewhere Cock reported the classicist Peter Wilhelm Forchhammer who accompanied, without pay, Captain T. A. Spratt in the Mediterranean (1838–1840). The irascible botanist and phrenologist Hewett Cottrell Watson sailed as unpaid civilian naturalist aboard HMS *Styx* on a surveying voyage to the Azores in 1842.⁷⁵ The Manxman Edward Forbes (1815–1854) was invited by Captain Thomas Graves and sanctioned by the Admiralty to join HMS *Beacon* as naturalist during a survey of the Mediterranean (1841–1842). Forbes too was referred to as 'naturalist' by the officers and in his own publications.⁷⁶

These examples refute the long-standing generalization amongst historians of science that Royal Navy ships' surgeons in the mid-nineteenth century were, by default, official ship's naturalist. Hence McCormick was not the 'official naturalist' of the *Beagle* as so often claimed. Randolph Cock observed: 'Whilst the distinction between naval surgeon and civilian naturalist might seem significant, in fact, when it came to the appointment of a naturalist to a naval vessel, it does not appear to have been uppermost in the mind of either the Hydrographer [Beaufort] or his most

⁶¹ Dillon (1829, Vol. 1, pp. 52–53).

⁶² Dillon (1829, Vol. 1, p. 60).

⁶³ Dillon (1829, Vol. 1, p. 60).

⁶⁴ Richardson also accompanied Franklin during the *Coppermine* expedition of 1819–1822. Darwin later wrote Richardson's Royal Medal Announcement, see van Wyhe (2009, pp. 256–257).

⁶⁵ Franklin & Richardson (1828). Richardson's results were largely published in Richardson (1829–1837). Other parts of Richardson's collections published in Hooker (1829–1840).

⁶⁶ Back (1836, pp. 47, 58, 223, 298). King published his own account as: King (1836, p. 22).

⁶⁷ Back (1836, pp. 241, 360, 410).

⁶⁸ Webster (1834).

⁶⁹ Beechey (1831, pp. xiv, vii). Lay is named incorrectly as 'Mr. Tradescant' in CCD1:162.

⁷⁰ Jukes (1847).

⁷¹ Cock (2004, pp. 95–112).

⁷² Tuckey and Smith (1818, p. xxx).

⁷³ Tuckey & Smith (1818, pp. 12, 72), et al. Incidentally the *Congo*'s naturalists used a 'towing net' to collect marine life (pp. 9, 11–12, 40, 55), compare with Keynes (2002, p. 52).

⁷⁴ Cock (2003). I am grateful to Alistair Sponsel for calling Cock's thesis to my attention, and in particular the example of Pashley.

⁷⁵ Egerton (2003, pp. 86–98).

⁷⁶ See letter from Lieutenant Spratt quoted in Forbes (1855, p. x) and Forbes (1844, pp. 129–193).

frequent collaborator in the selection and recruitment of naturalists, Sir William Jackson Hooker. . . In neither case, however, does it seem to have entered into their consideration whether the candidate was a naval surgeon—already on the payroll—or a civilian ‘savant’ or ‘philosopher’; the concern was simply to appoint an appropriate person.⁷⁷

Even as late as the 1860s Cuthbert Collingwood, who served as volunteer surgeon and ‘naturalist’ aboard HMS *Rifleman* and HMS *Serpent*, regretted that Royal Navy ships’ surgeons seldom attended to natural history:

I cannot help feeling great regret that the wonderful advantages which fall to the lot of many of our naval officers are so totally lost. They have their duties on board ship to perform, it is true, but that some of them should not have learned to relieve the dull and unendurable monotony of sea life by such studies is to me unaccountable. The medical officers especially, whose education would most fit them for these pursuits, and who have by far the most leisure at their disposal, might be expected to follow them with no less of advantage to themselves than of benefit to science; but it is only one in a thousand who troubles himself to observe what passes around him, or makes an exertion to share in the reputation acquired by a few of their fellow-surgeons, such as an Adams, or a Macdonald. Indeed there seems to me to be more hope of valuable materials being accumulated by the better class of merchant-skippers than by any branch of the naval service.⁷⁸

9. How Darwin’s ‘appointment received the sanction of the Admiralty’

Captain FitzRoy explained the origins of the offer to Darwin in the narrative of the voyage: ‘Anxious that no opportunity of collecting useful information, during the voyage, should be lost; I proposed to the Hydrographer that some well-educated and scientific person should be sought for who would willingly share such accommodations as I had to offer, in order to profit by the opportunity of visiting distant countries yet little known.’⁷⁹ Beaufort sought an appropriate person through Peacock at Cambridge University. Peacock wrote to the Professor of botany John Stevens Henslow in mid-August 1831: ‘An offer has been made to me to recommend a proper person to go out as a naturalist with this expedition. . . if Leonard Jenyns could go, what treasures he might bring home with him, as the ship would be placed at his disposal, whenever his enquiries made it necessary or desirable; in the absence of so accomplished a naturalist, is there any person whom you could strongly recommend: he must be such a person as would do credit to our recommendation’.⁸⁰ Henslow offered the position to Jenyns and then to Darwin.⁸¹ Thereupon Peacock wrote to Darwin: ‘they will furnish you with an official appointment’.⁸² No copy of the appointment

has been found. However evidence unearthed by Randolph Cock fills in the gap. At a meeting of the Admiralty Board on 22 October 1835. ‘Capt. FitzRoy was permitted by the Board’, their Lordships were reminded (it was, in any case, a different Board since 1831), to take a Naturalist to South America, but their Lordships refused to give him any pay. Fortunately a gentleman was found who was competent to the task, and who had zeal enough not to be deterred by such considerations, but the Captain agreed to keep him at his Table during the whole expedition.’⁸³

While trying to persuade his father to approve of the plan in late August 1831, Darwin listed his father’s objections, one of which shows explicitly that the family regarded the position as naturalist: ‘That they must have offered to many others before me, the place of Naturalist’.⁸⁴ It is also abundantly clear from the extant correspondence that Darwin’s family and friends regarded the position as naturalist, not companion.⁸⁵

On 1 September 1831 Beaufort informed FitzRoy: ‘I believe my friend Mr Peacock of Trin^y College Camb^e has succeeded in getting a ‘Savant’ for you—A Mr Darwin grandson of the well known philosopher and poet—full of zeal and enterprize and having contemplated a voyage on his own account to S. America’.⁸⁶ Clearly the offer was subject to FitzRoy meeting and approving the candidate, hence the Mr. Chester incident discussed above. On 5 September 1831 FitzRoy, having met the amiable and socially unobjectionable Darwin, wrote to Beaufort: ‘. . . I now request that you will apply for him to accompany me as a Naturalist’.⁸⁷ And finally, after the voyage, Darwin introduced his *Zoology of the voyage of the Beagle* with an explanation and acknowledgement of his place on the *Beagle*: ‘In consequence of Captain FitzRoy having expressed a desire that some scientific person should be on board, and having offered to give up part of his own accommodations, I volunteered my services; and through the kindness of the hydrographer, Captain Beaufort, my appointment received the sanction of the Admiralty’.⁸⁸ This statement seems to have been long overlooked.

During the voyage itself Darwin was referred to by the ship’s crew and in correspondence as the naturalist, or philosopher (or affectionately as ‘philos’ or ‘flycatcher’). In Bahia, Brazil on 5 March 1832 (before the departure of McCormick) Darwin wrote in his diary: ‘It is a new & pleasant thing for me to be conscious that naturalizing is doing my duty, & that if I neglected that duty I should at same time neglect what has for some years given me so much pleasure’.⁸⁹ Near the end of the voyage he wrote to his sister Caroline ‘it is a most dangerous task, in these days, to publish accounts of parts of the world, which have so frequently been visited. It is a rare piece of good fortune for me, that of the many errant (in ships) Naturalists, there have been few or rather no geologists. I shall enter the field unopposed’.⁹⁰ The ship’s artist, Conrad Martens, referred to Darwin more than once as ‘naturalist’ in his unpublished manuscript journal (1833–1835).⁹¹ A letter from Beaufort to Captain Beechey leading to the appointment of Barclay in 1835 referred to Darwin:

⁷⁷ Cock (2004).

⁷⁸ Collingwood (1868, p. 432).

⁷⁹ FitzRoy (1839, Vol. 2, p. 18).

⁸⁰ Peacock to Henslow [6 or 13 August 1831] CCD1:127.

⁸¹ Jenyns’ account is given in Blomefield (1887, p. 45).

⁸² Peacock to Darwin [c. 26 August 1831] CCD1:130.

⁸³ Quoted in Cock (2004, p. 206).

⁸⁴ Darwin to R. W. Darwin 31 August [1831] CCD1:133.

⁸⁵ Darwin to Susan Darwin [6 September 1831] CCD1:143; Darwin to W. D. Fox 6 [September 1831] CCD1:145; Darwin to Susan Darwin [9 September 1831] CCD1:146; Darwin to J. S. Henslow 9 [September 1831] CCD1:148; Darwin to Charles Whitley [9 September 1831] CCD1:150; John Coldstream to Darwin 13 September 1831 CCD1:151; Charles Whitley to Darwin 13 September 1831 CCD1:153; Darwin to FitzRoy [19 September 1831] CCD1:161; Darwin to W. D. Fox 19 [September 1831] CCD1:162.

⁸⁶ Beaufort to FitzRoy 1 September [1831] CCD1:136.

⁸⁷ FitzRoy to Beaufort 5 September 1831 CCD1:143.

⁸⁸ Darwin (1838, p. i).

⁸⁹ Keynes (1984, p. 44).

⁹⁰ Darwin to Caroline Darwin 29 April 1836 CCD1:496. I am grateful to Alistair Sponsel for bringing this letter to my attention.

⁹¹ State Library of New South Wales, Australia, A 429.

'You know that their Lordships allowed Capt. FitzRoy to take Dr [sic] Darwin with him as Geologist and philosopher general, borne as supernumerary for victuals without pay... is it your intention to ask for such a personage? and have you anyone in your eye? If so there is no time to lose...' ⁹² FitzRoy himself reported that 'While the officers of the *Beagle* were employed in their usual duties afloat, Mr. Charles Darwin, a zealous volunteer, examined the shores. He will make known the results of his five year's voluntary seclusion and disinterested exertions in the cause of science. Geology has been his principal pursuit.' ⁹³ A letter from a Scottish plant collector in Brazil who assisted Darwin, John Tweedie, in April 1834 refers to 'Mr. Darwin Naturalist of His Majesty's Ship *Beagle* a discovery ship'. ⁹⁴ Even the president of Chile, in Darwin's 1835 passport, referred to Darwin as: 'El Naturalista Carlos Darwin'. ⁹⁵

Contemporary press reports also cited Darwin aboard the *Beagle* as someone engaged in the pursuit of science. The *Army and Navy Chronicle* reported shortly after the return of the *Beagle* 'Geology and Natural History will receive contributions from this voyage, as well as Hydrography and Geography. Mr. Charles Darwin, a zealous unpaid tributary to the cause of science, has labored unremittingly. The medical and other officers have collected, in proportion to their opportunities and limited means of preserving specimens.' ⁹⁶ Of course none of these can be relied on as having intimate knowledge of the conditions of Darwin's appointment, but they do serve to show the widespread and entirely consistent character of contemporary descriptions of Darwin's role as naturalist.

After the voyage Darwin was listed by FitzRoy in the expedition narrative as: 'Charles Darwin... Naturalist'. ⁹⁷ In Darwin's own volume of the expedition narrative he was termed 'Naturalist to the *Beagle*'. ⁹⁸ And in Darwin's other government-sponsored publications, *Zoology of the voyage of H.M.S. Beagle under the command of Captain FitzRoy, R.N., during the years 1832 to 1836* (1838–1843) and the three volumes of *The geology of the voyage of the Beagle, under the command of Capt. Fitzroy, R.N. during the years 1832 to 1836* (1842–1846) he was identified on the title pages as 'Naturalist to the expedition'. In a series virtually identical in appearance to Darwin's *Zoology* (also published by Henry Colburn), Richard Brinsley Hinds' *The botany of the voyage of H.M.S. Sulphur, under the command of Captain Sir Edward Belcher, R.N. where Darwin was named 'naturalist to the expedition' on the title page Hinds was listed as 'Surgeon, R.N., attached to the Expedition.' This publication, like Darwin's, was 'Published under the Authority of the Lords Commissioners of the Admiralty.' Even years after the voyage Darwin wrote wistfully to FitzRoy: 'I think it far the most fortunate circumstance in my life that the chance afforded by your offer of taking a Naturalist fell on me.' ⁹⁹*

All of this attention to what Darwin was called should not obscure consideration of what Darwin actually did during the voyage. During the entire voyage Darwin acted as naturalist—collecting thousands of natural history specimens, geological, zoological and botanical. These were shipped back to Britain by the Royal Navy. Darwin wrote thousands of pages of scientific notes on his observations. And Darwin could not have performed a role of 'companion' to the captain very effectively since Darwin spent seventy percent of the voyage ashore as a naturalist. ¹⁰⁰

10. Conclusion

To summarize the main points of this essay, the *Beagle's* surgeon, Robert McCormick, was not the assigned or official naturalist on HMS *Beagle* as so frequently asserted in the historical literature. Indeed uniquely, according to FitzRoy, for the *Beagle's* second voyage (with Darwin) no officer was 'ordered to collect'. Why were the *Beagle's* orders unique in this respect? Probably because the Admiralty approved Darwin to travel on board as naturalist. Darwin was informed by Peacock c. 26 August 1831 'they will furnish you with an official appointment' and FitzRoy asked Beaufort on 5 September 1831 'I now request that you will apply for him to accompany me as a Naturalist'. And Darwin thanked Beaufort through whom 'my appointment received the sanction of the Admiralty'. ¹⁰¹

While it is also true that Darwin was the guest and even the companion of FitzRoy—it is a mistake to use these terms as if they were alternatives to the naturalist of the *Beagle*. A 'companion' and official naturalist were not contradictory or mutually exclusive (as with the case of Richard King mentioned above). Hence it is more accurate to refer to Darwin as the 'naturalist' because 'companion' has become loaded with misleading baggage.

Of course it remains true that Darwin's presence had a social role too, he alone enjoyed dining rights with the captain. Nevertheless the traditional interpretation that FitzRoy could not have made the journey without a companion has a serious fault. Would the Admiralty assign a captain to such duties if he could not have done so without going mad or killing himself? Surely not. And the supposed remedy to such a hypothetical danger would in any case surely not be left to the captain to supply, or not, by inviting a companion. If so there would be endless examples of captains' gentlemen companions in Royal Navy surveying expeditions. There are not.

Darwin was on board the *Beagle* at the invitation of and as guest of FitzRoy, appointed naturalist by the Admiralty, on the books for victuals, at liberty to quit the voyage at any time (at which point he would have been taken off the ship's books) and was allowed to dispose of his collection so long as it went to a public body. To be aboard as the guest of the Captain was a way of articulating relative status, authority and patronage.

But most importantly of all, Darwin actually acted as naturalist throughout the voyage. Darwin was referred to at the time exclusively as the 'naturalist'. In the light of all this evidence the modern view that Darwin was not the *Beagle's* naturalist but in fact the gentleman companion for the captain is shown to be untenable. A more parsimonious interpretation is that Charles Darwin was the naturalist on HMS *Beagle*—even the 'sanctioned' naturalist.

Continuing to portray Darwin as 'companion' rather than 'naturalist' obliterates the most conspicuous example of the long, gradual transformation towards scientific professionalization in the life sciences. Although an unpaid gentleman not in a permanent position (and therefore still bearing important attributes of the gentleman of science of a previous generation), Darwin's position was actually a half-way hybrid towards a more fully professional position. 'Naturalist' was, after all, a recognized, if not yet fully defined,

⁹² Beaufort to Beechey 14 October 1835, quoted in Cock (2004, p. 206).

⁹³ FitzRoy (1836, p. 312).

⁹⁴ Tweedie to W. J. Hooker April 1834 held in Directors' Correspondence Vol. 67 f.199, Royal Botanic Gardens, Kew. I am grateful to Jeff Ollerton for bringing this letter to my attention. See Ollerton, Chancellor, & van Wyhe (2012).

⁹⁵ Darwin Archive, Cambridge University Library, DAR 44.29, reproduced as colour facsimile in van Wyhe (2008, p. 21).

⁹⁶ Anonymous (1836a, p. 346). See also Anonymous (1836b, p. 755).

⁹⁷ FitzRoy (1839, Vol. 2, p. 20). Darwin is listed in the index as: 'Darwin, Mr. Charles, volunteers as naturalist', p. 686. See also the story related by FitzRoy where Darwin is referred to in Spanish as a *naturalista*, FitzRoy (1839, Vol. 2, p. 104).

⁹⁸ Darwin (1839, p. 1).

⁹⁹ Darwin to FitzRoy 20 February 1840 CCD2:255.

¹⁰⁰ Rookmaaker (2009).

¹⁰¹ Darwin (1839).

specialized role for an individual to occupy. Over the course of the nineteenth century the gentleman naturalist would become the paid naturalist. The professional naturalist would evolve into the professional scientist, paid by government, institution or industry.

Historians of science are apparently susceptible to historical claims which imply that that we have overturned old-fashioned views with our more sophisticated approaches. Thankfully this is very often the case. But this should provide no shelter for interpretations which are incorrect.

Acknowledgements

I am grateful to Simon Keynes, one of the most knowledgeable researchers on the *Beagle* voyage, for encouraging my scepticism of the 'companion' view. Gordon Chancellor has remained steadfastly encouraging and supportive. Jim Secord and Alistair Sponsel gave particularly helpful critical feedback. Sponsel also very kindly sent transcriptions from archival manuscripts from his own research and alerted me to new sources. Kees Rookmaaker also provided important assistance. My grateful thanks also to Jon Hodge and Greg Radick for helpful comments and suggestions and for helping to finally get this article into print. This article also benefited from materials sent to me several years ago by Adrian Desmond. An earlier version of this paper was presented at the British Society for the History of Science annual conference in 2010.

References

- Abel, C. (1818). *Narrative of a journey in the interior of China*. London: Longmans.
- Anonymous (1812). Huber on ants. *The Edinburgh Review*, 20, 143–144.
- Anonymous (1826). *Regulations established by the king in council and instructions issued by the lords commissioners of the admiralty relating to his majesty's service at sea*. London: John Murray.
- Anonymous (1836a). His Majesty's ship *Beagle*. *The Naval Magazine*, 3, 346.
- Anonymous (1836b). Return of the *Beagle* and Darwin's observations. *Nautical Magazine*, 5, 755.
- Armstrong, P. (2004). *Darwin's other islands*. New York and London: Continuum.
- Atkins, H. (1976). *Down: The home of the Darwins*. London: Royal College of Surgeons (Phillimore).
- Ayres, C. E. (1932). *Huxley*. New York: W. W. Norton & Co.
- Back, G. (1836). *Narrative of the Arctic land expedition to the mouth of the Great Fish River*. Philadelphia: Carey.
- Barlow, N. (1945). *Charles Darwin and the voyage of the Beagle*. London: Pilot Press.
- Barlow, N. (Ed.). (1958). *The autobiography of Charles Darwin 1809–1882: With the original omissions restored*. London: Collins.
- Beechey, F. W. (1831). *Narrative of a voyage to the Pacific and Beering's strait, to co-operate with the Polar expeditions: Performed in his majesty's ship blossom (2 pts.)*. London: H. Colburn & R. Bentley.
- Blomefield, L. J. (1887). *Chapters in my life*. Bath: [privately printed].
- Bowlby, J. (1990). *Charles Darwin: A new biography*. London: Hutchinson.
- Bowler, P. J. (1984). *Evolution history of an idea*. Berkeley: University of California Press.
- Bowler, P. J. (2011). *Darwin—Off the record*. London: Watkins.
- Brent, P. (1981). *Charles Darwin: "A man of enlarged curiosity"*. London: Norton.
- Browne, J. (1995). *Charles Darwin: Voyaging*. London: Pimlico.
- Browne, J., & Neve, M. (Eds.). (1989). *Charles Darwin: The voyage of the Beagle*. London: Penguin.
- Burkhardt, F. et al. (Eds.). (1985). *The correspondence of Charles Darwin*. Cambridge: Cambridge University Press (abbreviated CCD).
- Burstyn, H. L. (1975). If Darwin wasn't the *Beagle's* naturalist, why was he on board? *British Journal for the History of Science*, 8, 62–69.
- Burton, J. W. (1828). Stephens's British insects. *The Monthly Review*, 39, 370.
- Burton, J. W. (1837). *Lectures on entomology*. London: Simpkin and Marshall.
- Camerini, J. (1997). Remains of the day: Early Victorians in the field. In B. Lightman (Ed.), *Victorian science in context* (pp. 354–377). Chicago: University Press.
- Chancellor, G., & van Wyhe, J. (Eds.). (2009). *Charles Darwin's notebooks from the voyage of the Beagle*. Cambridge: University Press (with the assistance of Kees Rookmaaker).
- Cock, R. (2003). Sir Francis Beaufort and the co-ordination of British scientific activity, 1829–55. PhD thesis, Cambridge University.
- Cock, R. (2004). Scientific servicemen in the Royal Navy and the professionalisation of science. In D. Knight & M. D. Eddy (Eds.), *Science and beliefs: From natural philosophy to natural science 1700–1900* (pp. 95–112). Aldershot: Ashgate.
- Collingwood, C. (1868). *Rambles of a naturalist on the shores and waters of the China sea*. London: John Murray.
- Dampier, W. C., & Dampier, C. D. H. (1912). *Science and the human mind*. London: Longmans.
- Darwin, C. R. (1834). Geological diary: Falkland islands. (3.1834) CUL-DAR32. 151–152. Transcribed by John van Wyhe and Kees Rookmaaker. In J. van Wyhe (Ed.) (2002). *The complete work of Charles Darwin* Online: <<http://darwin-online.org.uk/>>.
- Darwin, C. R. (Ed.). (1838). *Fossil mammalia. Part 1 No. 1 of the zoology of the voyage of H.M.S. Beagle. By Richard Owen. Edited and superintended by Charles Darwin*. London: Smith Elder and Co.
- Darwin, C. R. (1839). *Journal and remarks, 1832–1836*. London: Henry Colburn.
- Darwin, C. R. (1859). *On the origin of species by means of natural selection, or the preservation of favoured races in the struggle for life*. London: John Murray.
- Darwin, F. (1887). *The life and letters of Charles Darwin* (Vol. 1). London: John Murray.
- Darwin, F. (1912). FitzRoy and Darwin, 1831–36. *Nature*, 88, 547–548.
- de Vries-Evans, S. (1993). *Conrad martens on the Beagle and in Australia*. Chapel Hill, Brisbane: Pandanus Press.
- Desmond, A., Browne, J., & Moore, J. (2004). *Darwin, Charles Robert (1809–1882)*. Oxford: University Press. Oxford Dictionary of National Biography.
- Desmond, A., & Moore, J. (1992). *Darwin*. London: Penguin.
- Desmond, A., & Moore, J. (2009). *Darwin's sacred cause*. London: Penguin.
- Dillon, P. (1829). *Narrative and successful result of a voyage in the South Seas* (Vol. 1). London: Hurst, Chance & Co.
- Egerton, F. N. (2003). *Hewett Cottrell Watson: Victorian plant ecologist and evolutionist*. Aldershot: Ashgate.
- Endersby, J. (2006). Wallace redux? *Minerva*, 44, 209–218.
- Endersby, J. (Ed.). (2009). *Origin of species*. Cambridge: University Press.
- FitzRoy, R. (1836). Sketch of the surveying voyages of His Majesty's Ships Adventure and Beagle, 1825–1836. Commanded by Captains P. P. King, P. Stokes, and R. Fitz-Roy, Royal Navy. *Journal of the Geological Society of London*, 6, 311–343.
- FitzRoy, R. (1839). *Narrative of the surveying voyages of His Majesty's Ships Adventure and Beagle between the years 1826 and 1836 (3 Vols.)*. London: Henry Colburn.
- Forbes, E. (1844). Report on the Mollusca and Radiata of the Aegean Sea, and on their distribution, considered as bearing on geology. *Report of the British Association for the Advancement of Science for, 1843*, 129–193.
- Forbes, E. (1855). *Literary papers by the late Professor Edward Forbes*. F. R. S. London: Lovell, Reeve.
- Franklin, J., & Richardson, J. (1828). *Narrative of a second expedition to the shores of the polar sea*. Philadelphia: Carey.
- Ghiselin, M. T. (2009). Darwin: A reader's guide. *Occasional Papers of the California Academy of Sciences*, 155, 1–185.
- Gould, S. J. (1977). *Ever since Darwin*. New York: Norton.
- Gruber, J. W. (1969). Who was the *Beagle's* naturalist. *British Journal for the History of Science*, 4, 266–282.
- Herbert, S. (2005). *Charles Darwin, geologist*. Ithaca: Cornell University Press.
- Hodge, J., & Radick, G. (Eds.). (2003). *The Cambridge companion to Darwin*. Cambridge: University Press.
- Hooker, W. J. (1829–1840). *Flora Boreali-Americana* (2 Vols.). London: H. G. Bohn.
- Johnson, S., Walker, J., & Jameson, R. S. (Eds.). (1827). *A dictionary of the English language*. London: William Pickering.
- Jukes, J. B. (1847). *Narrative of the surveying voyage of H. M. S. Fly* (2 Vols.). London: Boone.
- Keevil, J. J. (1943). Robert McCormick, R. N. The stormy petrel of naval medicine. *Journal of the Royal Naval Medical Service*, 29, 36–62.
- Keynes, R. D. (1984). *Charles Darwin's Beagle diary*. Cambridge: University Press.
- Keynes, R. D. (2002). *Fossils, finches and fuegians*. London: Harper Collins.
- King, R. (1836). *Narrative of a journey to the shores of the Arctic Ocean* (2 Vols.). London: Bentley.
- King, P. (1839). *Narrative of the surveying voyages of His Majesty's Ships Adventure and Beagle between the years 1826 and 1836 (3 Vols.)*. London: Henry Colburn.
- Livingstone, D. N. (1997). *Darwin's forgotten defenders*. Vancouver: Regent College Publishing.
- Lort Stokes, J. (1846). *Discoveries in Australia* (Vol. 1). London: Boone.
- McCormick, R. (1884). Voyages of discovery in the Arctic and Antarctic seas, and round the world (2 Vols.). London: Sampson.
- Moorehead, A. (1969). *Darwin and the Beagle*. New York: Harper & Row.
- Ollerton, J., Chancellor, G., & van Wyhe, J. (2012). John Tweedie and Charles Darwin in buenos aires. *Notes and Records of the Royal Society*, 66(2), 115–124.
- Parry, W. E. (1826). *Journal of a third voyage for the discovery of a north-west passage, from the Atlantic to the Pacific*. Philadelphia: Carey.
- Porter, D. (1985). The *Beagle* collector and his collections. In D. Kohn (Ed.), *Darwinian heritage*. Princeton: University Press.
- Richardson, J. (1829–1837). *Fauna Boreali-Americana* (4 Vols.). London: John Murray.
- Rookmaaker, Kees (2009). Darwin's itinerary on the voyage of the *Beagle*, <<http://darwin-online.org.uk/content/frameset?viewtype=text&itemID=A575&pageseq=1>>. In Wyhe, John van (ed.) (2002). *The complete work of Charles Darwin* Online: <<http://darwin-online.org.uk/>>.
- Ruse, M. (2009). The origin of the origin. In *The Cambridge companion to the "origin of species"*. Cambridge: University Press.
- Stanbury, D. (1982). H.M.S. 'Beagle' and the peculiar service. In R. G. Chapman & C. T. Duval (Eds.), *Charles Darwin 1809–1882: A centennial commemorative*. Wellington, New Zealand: Nova Pacifica.
- Steel, E. (2011). *He is no loss: Robert McCormick and the voyage of HMS Beagle*. London: The British Society for the History of Science (BSHS) (Monograph 14).
- Sulloway, F. (1982). Darwin and his finches: The evolution of a legend. *Journal of the History of Biology*, 15, 1–53.

- Thomson, K. S. (1995). *HMS Beagle: The story of Darwin's ship*. London: W. W. Norton.
- Tuckey, J. H., & Smith, C. (1818). *Narrative of an expedition to explore the river Zaire, usually called the Congo, in South Africa, in 1816, under the direction of Captain J. K. Tuckey R.N. To which is added, the journal of Professor Smith; some general observations on the country and its inhabitants*. London: John Murray.
- van Wyhe, J. (Ed.) (2002). *The complete work of Charles Darwin* Online: <<http://darwin-online.org.uk/>>.
- van Wyhe, J. (2008). *Darwin*. London: Andre Deutsch.
- van Wyhe, J. (Ed.). (2009). *Charles Darwin's shorter publications 1829–1883*. Cambridge: University Press.
- von Humboldt, A. (1814–1829). *Personal narrative of travels to the equinoctial regions of the new continent* (7 Vols.). London: Longman, Hurst, Rees, Orme and Brown.
- Webster, W. H. B. (1834). *Narrative of a voyage to the southern Atlantic Ocean... from the private journal of W. H. B. Webster* (2 Vols.). London: Bentley.
- White, M., & Gribbin, J. (1995). *Darwin: A life in science*. London: Simon & Schuster.