PRIME SUSPECT: WILLIAM COWPER PRIME IN THE HOLY LAND AND THE IDENTITY OF "AN AMERICAN" IN *HARPER'S NEW MONTHLY MAGAZINE*, 1858

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One of the most popular writers for travellers to Egypt, the Holy Land and Syria in the later nineteenth century was William Cowper Prime. His journey of 1855–1856 resulted in two books which went through multiple editions over a period of twenty years, a stimulus to follow in his footsteps and a standard text in the hands of many pious Christians. A series of five long articles published anonymously in Harper's New Monthly Magazine *in the mid- to late 1850s can be shown as by Prime. All have been accepted as factual reports of actual events, places, and people but closer examination leaves little doubt they are fictitious. In the light of these conclusions, it is clear Prime had a taste not just for the wild exaggeration parodied by Mark Twain, but also outright invention and we must be cautious in using his writings as sources.*

Keywords: William Cowper Prime, authorship, travel writing, Harper's New Monthly Magazine

I. INTRODUCTION

Reports by nineteenth-century western travellers of their journeys in the Levant and Egypt are valuable sources of information on places and people for archaeologists, historians, and anthropologists. The places mentioned are often now damaged or lost, and the societies of Late Ottoman Syria, Palestine, and Egypt have been utterly transformed. The number of such reports is large; numerous books purporting to be diaries or letters written at the time (or sanitised and "improved" versions of the same) were common, but increasingly deplored by some reviewers who saw them as repetitively similar.

Many of these books were essentially — even explicitly — private publications for family and friends; a small print run, with few ever lodging in libraries. The numerous articles often went into literary or religious periodicals and magazines, now long-since defunct and their contents seldom known. Much else remained in the form of field diaries, letters, and notes, preserved in private hands or formal archives and known only to a handful — and even then seldom penetrated by those with the skills and patience to decipher fading pencil texts written in difficult travel circumstances.

The wholesale digitisation of out-of-copyright books, periodicals and magazines in libraries, and of at least the catalogues of archives, has brought numerous rare or previously unpublished travellers' accounts to wider attention. However, such riches are not without their attendant problems. Although modern research has identified many, authors of published works were often anonymous. Moreover, it was common to omit references to companions or reduce them to an uninformative "Mr L" or "Baron H—". More insidious, there was scope for (at the least) blurring the boundary between factual reports and entertaining fictions. This last tendency is sometimes made explicit, but it is not always made clear. The scholar mining this

mountain of data needs to know if the content is fact or fiction, or some combination of the two. We need to know, too, the motivation of the writer in undergoing the journey, writing about it, and undertaking subsequent publication.

The present article is a survey and analysis of the writings purportedly authored by one of the more prolific and influential writers on travel in the Near East, the American William Cowper Prime (1825–1905). The scope of the writings is uncertain and several items have only been attributed to him tentatively, while others, which are apparently his work, have largely remained unattributed. Many of these are substantial — each running to several thousand words, and the five of particular interest below totalling almost 45,000 words or the equivalent of a small book. As they often contain information not found elsewhere or offer new slants on what contemporaries reported, and shed light on the reliability of his major works, it is important to define the corpus. The material can be investigated by the traditional examination of the content and that is highly suggestive both of authorship and its factual status The second approach is more quantitative, applying computational and statistical methods to discern stylistic patterns and to generate authorial profiles. In order to conduct authorship attribution tests of this kind, a corpus of comparison texts is required, such that the likely, if not all, authorial candidates are represented.

To anticipate this study's conclusions, analysis of both types confirms the probability that the five items of central interest below were the work of Prime. Analysis of the chronology and content reveals they are fiction — not just fiction, but inaccurate characterisation of places and people which could have been obtained by a more careful reading by scholars of the significant corpus of reports by previous travellers. Under these circumstances, we should probably revisit Prime's other works purporting to be "non-fiction", especially his books. Mark Twain was already scathing about what he called Prime's exaggeration and cloying sentimentality in those works — what would now be characterised as shameless Orientalism:

He never said he was attacked by Bedouins, I believe, or was ever treated uncivilly, but then in about every other chapter he discovered them approaching, any how, and he had a blood-curdling fashion of working up the peril; and of wondering how his relations far away would feel could they see their poor wandering boy, with his weary feet and his dim eyes, in such fearful danger; and of thinking for the last time of the old homestead, and the dear old church, and the cow, and those things; and of finally straightening his form to its utmost height in the saddle, drawing his trusty revolver, and then dashing the spurs into "Mohammed" and sweeping down upon the ferocious enemy determined to sell his life as dearly as possible. True the Bedouins never did any thing to him when he arrived, and never had any intention of doing any thing to him in the first place, and wondered what in the mischief he was making all that to-do about […] (Twain 1869, 483–84).

2. WILLIAM COWPER PRIME

The family was a prominent one in New England. Not the first of his family to do so, Prime graduated from Princeton University in 1843. He was the younger brother of two clergymen, Samuel Irenaeus Prime (1812–1885) and Edward Dorr Griffin Prime (1814–1891). He subsequently trained as a lawyer, but made a name as a journalist and author, traveller, numismatist, and art historian. Prime is remembered today — if he is remembered at all — for his role in the establishment of the Department of Art and Archaeology at Princeton University, and in the establishment and early development of the Metropolitan Museum of Art in New York. Contemporaries who read Mark Twain's delightful *The Innocents Abroad,* probably knew that the "Wm. C. Grimes" he amusingly parodies as the author whose books his fellow

pilgrims avidly read as they tour the Holy Land, is Prime; few today are likely to know who was intended or why.

It was not always so. Although the publications of Prime are hardly known today, in the mid- and later nineteenth century he was a prolific and popular author. He is credited with authoring several books and numerous articles, the latter often published with a sobriquet or entirely anonymously. Arising from a tour he made to Egypt, the Holy Land and Syria between 1855 and 1856 were the two books eagerly devoured by pious Christians — or at least the Protestants — everywhere: *Boat Life in Egypt and Nubia* and *Tent Life in the Holy Land*, both published in New York just a year after his return (Prime 1857a, 1857b). The former went through eleven editions between 1857 and 1877, the latter through ten editions between 1857 and 1875.

Prime had already published several articles about his travels in Egypt and the Holy Land, some of them appearing while he was still overseas, and these were then utilised — sometimes extensively and *verbatim*, in the books. These preliminary articles, nine of them under the heading "Passages of Eastern Travel" with the by-line "An American", were all published in successive issues of *Harper's New Monthly Magazine* in 1856 (Table 1, nos. 1–9). Also disguised, as was common, are people named in the articles (and books) including Prime himself and his own travelling companions (see Table 1).

Of importance here, however, is a further series of articles — likewise published in *Harper's Magazine,* following soon after the earlier nine "Passages" articles, and all on similar Near Eastern themes. Five were published in 1857 (Table 1, nos. 10–14) and another five in 1858 (Table 1, nos. 15–19). A further anonymous essay, not on the Near East, is included because it seems to be by the same authors and helps clarify authorship of them all (Table 1, no. 20).

Neither in the 1850s nor now in its publicly available online digital "Archive" area, does *Harper's* attribute to Prime any of the five essays of particular interest (nos. 15–19). On the other hand they were originally presented no differently than were nos. 1–9 and seemed, indeed, to follow on from them; they are now explicitly listed in the *Harper's* Archive as "Articles" rather than "Fiction". In the late nineteenth century, a bibliographer compiled a list of works on the "Bible Lands" attributed to Prime. In addition to his two books, many of these *Harper's* essays — both the "Passages" articles which subsequently appeared in large part in his books (Table 1, nos. 1–9) and others with no clear by-line (Table 1, nos. 10–11, 13, 16, 17, 19) were included; in effect, all the articles except those on themes just outside the "Bible Lands" (Table 1, nos. 12, 14, 15, and 18) (Mitchell 1887, 116).

There are two principle reasons it matters whether these items are by Prime and whether some may be fiction. First, Prime's writings were influential for a generation covering the third quarter of the nineteenth century ("distinguished by fine descriptive quality, a philosophic temper, and profound sentiment" [Warner 1902, 11821]), and second, if some are fiction, historians must exclude them from the bibliography of primary accounts of the region even if they are of interest for other reasons.

It seems highly likely that all of these *Harper's* articles were written by Prime, but that the writer was relaxed about the truth in most of them, and produced outright fiction in at least five (Table 1, nos. 15–19) — which we may call the "Peter" articles. These latter are especially important as the feisty image the writer presents of their characters, and the anecdotes they contain about the journey to and events at Petra, are at some variance with the considerable corpus of accounts by many other western travellers who made that same journey. Analysis of these "Peter" texts themselves certainly suggests they are fiction and the style is strongly reminiscent of Prime's. The attribution to Prime, however, can be established more reliably through stylometric analysis.

TABLE 1: Details of selected articles published in *Harper's New Monthly Magazine* between 1856 and 1859

No.	Year and month of publication	By-line	Title	Internally named western characters	Attribution to Prime
1*	1856 January	"An American"	"Passages of Eastern Travel" (1)	One or more of the writer, May, *Jacques* and Amy = Prime, his wife Miriam, her brother James and his wife Sarah	Mitchell (1887, 3011)
2*	1856 February	"An American"	"Passages of Eastern Travel' (2)	– do –	Mitchell (1887, 3011)
3*	1856 March	"An American"	"Passages of Eastern Travel' (3)	– do –	Mitchell (1887, 3011)
4*	1856 July	"An American"	"Passages of Eastern Travel' (4)	– do –	Mitchell (1887, 3011)
5*	1856 August	"An American"	"Passages of Eastern Travel" (5)	– do –	Mitchell (1887, 3011)
6*	1856 September	"An American"	"Passages of Eastern Travel" (6)	– do –	Mitchell (1887, 3011)
7*	1856 October	"An American"	"Passages of Eastern Travel" (7)	– do –	Mitchell (1887, 3011)
8*	1856 November	"An American"	"Passages of Eastern Travel" (8)	– do –	Mitchell (1887, 3011)
9*	1856 December	"An American"	"Passages of Eastern Travel' (9)	– do –	Mitchell (1887, 3011)
10	1857 January	"Prepared from the work of Lieut. Burton by An American"	"To Medina and Mecca"	None	Mitchell (1887, 3011)

Continued

TABLE 1: Continued

No.	Year and month of publication	By-line	Title	Internally named western characters	Attribution to Prime
11	1857 February	"An American"	"Sketches of Old Thebes"	One or more of the writer, May, *Jacques* and Amy = Prime, his wife Miriam, her brother James and his wife Sarah	Mitchell (1887, 3011)
12	1857 March	N/A	"From Thebes to the Pyramids"	One or more of the writer, May, *Jacques* and Amy = Prime, his wife Miriam, her brother James and his wife Sarah	
13	1857 April	N/A	"The Holy City"	One or more of the writer, May, *Jacques* and Amy = Prime, his wife Miriam, her brother James and his wife Sarah	Mitchell (1887, 3011)
14	1857 September	N/A	"Temples in which I have worshipped"	Several refs to Miriam = the actual name of Prime's wife.	
Ref to news of death of his father and brother-in-law — referred to by Prime in his books					
15	1858 February	("An American")	"An American at Constantinople"	One or more of the writer ("Peter") and his companions "Stephen Strong", "Benjamin Hall", "Pierre Laroche", "[John] S—"	
16	1858 April	("An American")	"An American at Sinai"	– do –	Mitchell (1887, 3011)
17	1858 May	N/A	"From Sinai to Wady Mousa"	– do –	Mitchell (1887, 3011)

TABLE I: Continued

No.	Year and month of publication	By-line	Title	Internally named western characters	Attribution to Prime
18	1858 October	N/A	"Islands and Shores of Greece"	– do –	
19	1858 November	N/A	"The Voyage of Paul"	– do –	Mitchell (1887, 3011)
20**	1859 March		"Croton water and its inhabitants"	The writer ("Peter")	

*Nos. 1–9 comprise a series of essays arranged chronologically and beginning at Malta and finishing near Mt Blanc.
**Set in New York City but with "Peter" as the writer and employing the same stylistic devices as in nos. 15–19.

3. PRIME'S TOUR OF THE MIDDLE EAST, 1855–1856

Prime began a tour of the Middle East in 1855 together with his wife Mary Hollister Prime (née Trumbull; 1827–1872), his wife's brother James Hammond Trumbull (1821–1897), and the latter's wife Sarah A. Trumbull (née Robinson; b. 1825). The Trumbulls were one of the leading families of Connecticut and several members made a reputation in the arts and sciences. James and Sarah were on their honeymoon, having married in April 1855. Mary Prime was a keen collector and student of ceramics, and after her death in 1872 Prime devoted himself to publishing her work and arranging for her assemblage to become the core of the museum collection at Princeton University (Warner 1902, 118*21*).

The party left the USA in summer 1855 for Europe. They were in Malta in October 1855 and on 27 October 1855 were in Egypt and drew up a contract for a Nile riverboat. They were at Wadi Halfeh on 25 December 1855, where he mentions carving his name on a rock (it may still be seen: pers. comm. Roger de Keersmaecker, 20 February 2013). From Alexandria in Egypt they sailed to Jaffa, then visited a range of the religious sites of the Holy Land before proceeding via Tiberias and Capernaum on the Sea of Galilee to Damascus. Finally they crossed the Lebanon Mountains to Beirut and the steamer for the start of the journey home via Smyrna and Constantinople. Prime made a second visit to the Near East, but not till 1869. His older brother, Samuel Irenaeus Prime, had earlier visited Egypt and Palestine during a trip from the USA from April 1853 to April 1854 (S.I. Prime 1859, 43–44).

All of this is set out both in his two successive books, published soon after his return (Prime 1857a, 1857b), and to a large extent in the series of nine lengthy "Passages" articles which had preceded. The details are clear, both regarding where Prime went — and where he did not. His party arrived in Egypt by sea from Malta and later sailed from Beirut to Constantinople. They did not cross Sinai or visit St Catherine's Monastery, Aqaba or Petra, and they did not sail on a small yacht in the eastern and central Mediterranean or Aegean as described in the "Peter" essays. More tellingly, the dates of events in the "Peter" articles can be determined quite closely and show them to be taking place largely after Prime was home in the United States. Indeed, the first essay (Table 1, no. 15) appears to begin in Constantinople at precisely the time Prime was quitting that city for the journey home.

The publication in 1869 of Mark Twain's *The Innocents Abroad*, the account of his journey through Europe and the Holy Land in late 1867 with a group of fellow Americans, may have undermined some of Prime's credibility. It includes several humorous tweaks of a writer he calls "Wm. C. Grimes". Grimes is cited as the author of two popular books keenly read by Twain's fellow pilgrims and many others: *Nomadic Life in Palestine* and *Life in Egypt* are Twain's thinly disguised titles for Prime's two travel volumes. Grimes is accused by Twain of an excess of vigour in his treatment of the "natives" during his tour of Egypt and the Holy Land. Twain observes that Grimes always seems to expect that any unknown parties approaching him are likely to be hostile and proceeds aggressively. In contrast, Grimes sees touching beauty in places and scenes Twain regarded as far more mundane (Twain 1869, 483–84, 508–12, 531–36, 540, 549–50; cf. 571, where he has something positive to credit to Prime by name). Prime is concerned with telling his readers what they want to hear and painting a scene of people and places to evoke the savagery but immense natural beauty of his own "frontier" in the United States.

After charging on horseback and then firing into a crowd at Samaria, "Grimes" stresses the salutary effect of firm violence: "I never lost an opportunity of impressing the Arabs with the perfection of American and English weapons, and the danger of attacking any one of the armed Franks. I think the lesson of that ball not lost" (quoted in Twain 1869, 533). He was unmoved when a young Christian boy he has denounced for theft is bastinadoed (a whipping on the soles of his feet) before his eyes — "As I mounted, Yusef once more begged me to

interfere and have mercy on them, but I looked around at the dark faces of the crowd, and I couldn't find one drop of pity in my heart for them" (Twain 1869, 535) — but is tearful at the sight of Christian holy places:

I stood in the road, my hand on my horse's neck, and with my dim eyes sought to trace the outlines of the holy places which I had long before fixed in my mind, but the fast-flowing tears forbade my succeeding. There were our Mohammedan servants, a Latin monk, two Armenians and a Jew in our cortege, and all alike gazed with overflowing eyes (Twain 1869, 534).

Twain saw his own companions emulating Grimes's advice, always ready to shoot on the one hand and, on the other, reading the landscape and people through the rosy aura they had encountered in his pages. Twain himself claimed, "I do not mind Bedouins, — I am not afraid of them; because neither Bedouins nor ordinary Arabs have shown any disposition to harm us, but I *do* feel afraid of my own comrades" (Twain 1869, 540). To be fair to Grimes, one of his companions was injured in a confrontation (detailed below) and there are numerous instances in the accounts of other travellers of Arabs attacking and robbing western travellers, but it was largely in the badlands between Jerusalem and Jericho, not in most of the rest of Palestine.

"Wm. C. Grimes" is of course William Cowper Prime. Twain ridiculed and criticised his sentimental work at length as "representative of a *class* of Palestine books" (Twain 1869, 536). The "class" was one he saw impacting daily on his own travelling companions:

These authors write pictures and frame rhapsodies, and lesser men follow and see with the author's eyes instead of their own, and speak with his tongue. What the pilgrims said at Caesarea Philippi surprised me with its wisdom. I found it afterwards in Robinson. What they said when Genessaret burst upon their vision, charmed me with its grace. I find it in Mr. Thompson's "Land and the Book." They have spoken often, in happily worded language which never varied, of how they mean to lay their weary heads upon a stone at Bethel, as Jacob did, and close their dim eyes, and dream, perchance, of angels descending out of heaven on a ladder. It was very pretty. But I have recognized the weary head and the dim eyes, finally. They borrowed the idea — and the words — and the construction — and the punctuation — from Grimes. The pilgrims will tell of Palestine, when they get home, not as it appeared to *them*, but as it appeared to Thompson and Robinson and Grimes — with the tints varied to suit each pilgrim's creed (Twain 1869, 511–12).

He went on:

I love to quote from Grimes, because he is so dramatic. And because he is so romantic. And because he seems to care but little whether he tells the truth or not, so he scares the reader or excites his envy or his admiration. He went through this peaceful land with one hand forever on his revolver, and the other on his pocket-handkerchief. Always, when he was not on the point of crying over a holy place, he was on the point of killing an Arab. More surprising things happened to him in Palestine than ever happened to any traveler here or elsewhere since Munchausen died (Twain 1869, 532).

4. THE "PETER" ESSAYS

The writer of nos. 15–19 in Harpers (Table 1) is identified as "Peter" in several places where he quotes conversations with others who use his name. No surname is ever given. In contrast, his close friend and travelling companion most of the time is regularly called by his full name, Stephen Strong, a fellow American. Then there is their French companion, said to have been a revolutionary on the barricades in 1848, Pierre Laroche. There is another American, usually just called John but probably the same as the man elsewhere called "John S—", and Benjamin Hall, an Englishman and apparently a doctor in the Royal Navy. None of those people can be traced under those names. The use of pseudonyms was common in such writing, but in this case none has been identified with a real person. Although these are realistic names, one may be suspicious: Stephen Strong is a vigorous, strong character; Pierre (another

"Peter"; meaning "the stone") Laroche (also "the stone") is a reliable if fiery Gaul, forever being teased affectionately by his American companions. While perhaps less symbolically styled, a doctor called Benjamin Hall has not been traceable in the records of the Royal Navy.

What then of the five essays? A close reading shows that they were published in the sequence of the chronological events recorded, and that they cover a period between April and June 1856 to mid- to late-1857. In short, they begin just *after* Prime left Constantinople to return home in May 1856 and cannot therefore relate to actual travel by Prime. The itinerary is not continuous: the first article has the writer in Constantinople/"Stambul"; the second places him in Egypt but largely telling the story of his friend Stephen Strong crossing the Sinai to Aqaba; in the third, he joins up with this friend's party at Aqaba and they visit Petra together and are then on their way to Hebron; the fourth reports on the same group sailing a private schooner from Constantinople around the Aegean (then onwards to the coast of Syria); and finally they retrace much of the sea journey of the Apostle Paul from Caesarea to Italy, their own journey ending at Malta (where Paul had been shipwrecked) but declaring their intention of going north to deliver their French companion to his homeland.

Read in isolation, each of these five essays can be accepted as interesting, reasonably plausible adventures, appropriate to the time and place. Occasionally one encounters anecdotes or accounts that are, at the least, surprising, and the impression is of characters who are assertive, bold, and enterprising. Collectively they do not ring true and the exaggerated if not outright invention of Prime's "non-fiction" books seem writ large in them — swashbuckling *Boys' Own* stories rather than reliable accounts of events.

The journeys reported were lengthy, demanding, dangerous, and full of adventure. The essays routinely assume familiarity with the Bible, ancient Greek and Latin, and the Classics. Peter and one or more of his companions explore Constantinople, Mount Sinai, Petra, Athens, Malta, and many lesser places; twice they save women from drowning as well as their cabin-boy; they confront beduin robbers and Greek bandits — including injuring some and killing one; as well as experiencing the dangers of the travel — Laroche twice thrown from a camel and John S— almost falling to his death from Mount Hor; and the unique experience of being present at Petra at the death of an 'Alawin sheikh. In addition, there are allusions to prior adventures in which Peter had apparently travelled in the Caucasus (around Mount Ararat) and to Diyarbakir on the river Tigris.

A few examples will suffice to illustrate the adventures and the style of writing. The first essay is set in Constantinople and dated to April 1856 from references to Ramadan, the recently ended Crimean War, the presence of British and French warships, and the American clipper *Great Republic*, at that time the largest in the world, which had been contracted by the French to carry munitions to the Crimea. The descriptions of the city are plausible enough, though one is surprised to find the writer not only saw the sultan in public but also exchanged a meaningful look with him ("An American" 1858a, 302–303). Peter recounts a day out on the upper reaches of the Golden Horn:

[…] we became entangled in a mass of caiques, and shooting across the bend, struck one on the quarter with our sharp bow. We ran upon her, pressing the gunwale down to the edge of the water, and before we could even shout she filled and down she went. You should have seen my friend Smith and myself as we plunged into the water to the rescue of the vailed [sic] ladies of whom there were three. Enveloped in their vast masses of silk they stood a fair chance of a speedy passage to Paradise, if, indeed, there be any Paradise for Moslem females. We struck the water as they did, and we struck bottom together, for there was not two feet on the sand-bar which most fortunately we were over. Smith seized one, I another, and the third, a huge, unwieldy bundle of silks, too large to attract sympathy just then, helped herself to her feet and into the caique when it was righted and bailed out, which was speedily accomplished. When this was done we had time to look at them a little. Smith had rescued a lady black as the slave Mesrour of Haroun Al Rasheed. I had picked up a girl blacker than his mother. The bundle of shawls and silks was the

mistress of the party, a little gem, if one could judge from her eyes, which sparkled with fun as she thanked us for rescuing her servants ("An American" 1858a, 301–302).

In the second essay, which opens in Cairo in February 1857, Peter has met an old friend, Stephen Strong, and subsequently goes to Aqaba to join him and his party (i.e. Pierre Laroche and Benjamin Hall) for a joint expedition to Petra. Much of this essay is a report of Strong's crossing of Sinai before Peter joined him. It includes, by way of stressing the dangers, an account of a shocking case from just a few weeks before Strong's expedition. In that instance, a British party, believing a beduin guard unnecessary, enrolled half a dozen British seaman as bodyguards. They were attacked in Sinai, their guards killed, the *pater familias* beaten, his wife and daughter "subjected to foulest outrage", stripped and robbed ("An American" 1858b, 611–12, 618). Nothing whatever is known of any such event, or of the assassination of the British Consul in Egypt he reports a little later.

The multitude of other travellers' stories we have from the nineteenth century makes it clear the crossing of the Sinai was physically hard but not normally dangerous. The story, however, allows for the next event, in which Strong's party was confronted by a group of some thirty spear-wielding beduin. Faced by four "Franks" armed with revolvers and their ten beduin guides with guns and spears ("An American" 1858b, 618), these beduin chose to embrace and be friendly. Later still, other beduin stole many of their camels. When confronted, the thieves mounted a wild and exciting charge, but pulled up short and abandoned their booty when they saw they were faced by not just armed beduin guards but a party of armed "Franks". Again, the story is not only at odds with the generally pacific reputation of the tribes in this region towards westerners but also with the insistence of other contemporary travellers on the utmost need to never shoot at beduin attackers. At Mount Sinai, Strong spots a graffito, one of many cut by previous western visitors. They existed, of course, though this one is not otherwise known:

[Strong was] only a sad traveler — sad now for he read the name of one who was once the light of a home in this far Western world beautiful, radiant in her purity, but whose name has not been uttered on any lip for many years — a forbidden, would that it were a forgotten, name! ("An American" 1858b, 622).

This strange encounter with someone he knew is explained as an "old, wild story of love, and sin, and shame" ("An American" 1858b, 622). The woman whose name he saw was "the daughter of a country clergyman in the happiest village of the State of New York" ("An American" 1858b, 622). She was raised in the parsonage, said to be as knowledgeable of the Bible as her father and able to read both Hebrew and New Testament Greek. From an aunt, she learned to sing and play the harp and guitar, which Peter characterises as accomplishments society esteems more highly than her languages. Her father, by the time Strong saw her name on Mount Sinai, was long dead, with his "hair grown white with the grief and shame of her fall" ("An American" 1858b, 622). He goes on:

She had fled with one who could not call her wife. They wandered over the world. My friend saw her name at Sinai; I saw it at Wady Halfeh, at Baalbec, on a column of the Parthenon; and saw it last on a white stone in a little graveyard under the shadow of the Jungfrau, where the moon shines sadly on the grass that covers her before it goes westward to hallow the night above her father's grave in the up-country church-yard. Well might he [i.e. Strong] pause when he saw that name written unblushingly on the rock. What wild fancy was it that brought those two sinners to hear the thunders of Sinai? ("An American" 1858b, 622).

The young woman is not named. The implication is that she had eloped with a married man and that they travelled extensively — to Mount Sinai, to Abu Simbel on Wadi Halfa some 900 km south of Cairo, to Baalbek, Athens, and then was finally laid to rest, buried in Switzerland in the Bernese Alps. It is a touching story, sentimental — and surely pure fiction.

Peter joined Strong at Aqaba and they travelled together to Petra, escorted by Achmed, son of Sheikh Hussein of the Alawin. The difficulty is, as numerous accounts by other travellers make clear, that no such son is known, that the Alawin would only have become their escorts after Aqaba, and that the Alawin were not the tribe of Petra — and certainly not trusted by the people whom they routinely cheated by smuggling in visitors and hustling them out swiftly without paying the required fee. There is further excitement, and even more inventive: Achmed is shot down by a beduin they encounter just near Petra and Peter gives a lengthy account of his lingering death and the touching conduct of his tribesmen. Achmed is said to have had seven brothers, all now dead, each dying without wife or children. Peter poetically renders Achmed's splendid and moving death scene by invoking a Titianesque image:

One might have thought him his father Ishmael dying on the desert that was his sole inheritance. No trappings of royalty were around him, such as surround the couches of princes of more wealthy lands. The lands of this Duke of Edom were the barren desert, stretching away in its wastes of rock and sand. His palace was the ruined palace of a Roman governor, down through the shattered front of which the blue sky reflected the light of the coming day before the sun came up to shine in Wady Mousa. The poor bournouse — the rough camel's-hair cloak that inswathed his form — was the substitute for the purple of a kingly death-bed; but more majestic countenance never shone on living men than was his as the dawn lit its thin features, and his father bent over him to say that he was dying ("An American" 1858c, 743).

Before he died, however, Achmed reveals a sympathetic curiosity about "Isa", that is, Jesus. He acknowledged his Islamic faith, but also wore it lightly. He had been told biblical stories by Father Paul at "St Catherine's Convent" and had listened intently to those about Jesus that Stephen Strong had told. Now, on his deathbed, he asked the westerners to take not only his valuable cloak as an offering to the Al-Aqsa Mosque in Jerusalem, but also the money sown into it for an offering to the guardian of the tomb of the man he embraced in his last words: "Isa Ben Mariam rasoul Allah!" (Jesus the son of Mary is the prophet of God!; "An American" 1858c, 743).

The travellers have an extended stay at Petra, protected by their evident sympathy for the dead sheikh and the attempt by the doctor, Benjamin Hall, to save him. But Peter then has almost nothing to say about the place — in sharp contrast with every other visitor who was happy to repeat descriptions and impressions the remarkable site made on everyone. Instead, we are given another highly fanciful story of people encountered there. The beduin took advantage of having a "hakim", Surgeon Hall, in their midst; in particular, the wife of Besharah, who brought a sick child. Peter thought he had seen a vision of a long-dead Roman maiden from his tent door one sleepless night, but Strong assured him it was this wife (who was no beduin). She relays her remarkable story: a Caucasian Georgian by birth, she had been enslaved and taken into the harem of a rich Pasha in Stambul, travelled to Syria with him when he was sent there on service, gifted to one of his favourites, was taken to Isfahan when this man was killed in fighting the Persians, lived there in comfort two years, was driven out by jealous wives, escaped, made her way to Mecca, was taken in by a merchant from Damascus, taken prisoner by the Alawin, and ended as a beduin wife at Petra:

She smiled sadly when her story was told, and I know of no picture of desolation so complete in all the earth as she presented to me at that moment. A woman without an affection, unloving and unloved, alone in God's great world, who never knew father, mother, sister, or husband — who loved no one on the face of the world, and who was never loved by human being such a woman, beautiful, noble in her sad beauty, sitting on the stones of a fallen arch in Petra, with her blind and dying baby on her lap […] ("An American" 1858c, 747).

The stay in Petra is rounded off with a comradely evening of entertainment, including Laroche singing the Marseillaise.

The fourth essay involves a cruise in the Aegean and islands, in a schooner — the *Lotus*, bought by the companion referred to as John, John S— or just S—. The inevitable adventures followed. At Rhodes, Peter is sadly disappointed by how much has changed since his last visit — the result of an earthquake (probably the serious one of 12 October 1856) and a gunpowder explosion shortly after (Ambraseys 2009, 683–84), both genuine events. He then begins his narrative on their third day on the island, with the story of a near-fatality involving a 12-year-old Greek boy from Smyrna, taken on as a temporary cabin boy:

[…] a shriek and a plash [*sic*] in the water startled us. We sprang to the deck. Iskander was gone. He had sprung like a monkey to the deck, but, missing his hold, fell back, and went down between the yacht and the boat. Three of us were over in a moment. Laroche alone could not swim, and made himself useless with a boat-hook, plunging it here and there in the water in a manner that would inevitably have proved fatal to the boy had he found him. Fortunately he did not, but John S— did, and we had him on deck in a moment, howling so furiously that there remained no reasonable doubt of the healthy state of his lungs ("An American" 1858d, 595).

They had a further adventure at Athens. John S— had taken a fancy to a pretty Greek girl — they seem only ever to encounter pretty girls — and it was only after several "coincidental" meetings and some coquettish behaviour that he agreed with Peter that she was a decoy for bandits. They decided to play along, armed themselves with specially made lead-loaded gloves and at least one gun, and followed John and the girl when they walked in the plain outside Athens. When the bandits sprang the trap they were swiftly beaten off: John killed one with a blow to the head; Laroche shot a second; and two more and the girl were taken prisoner. As Peter put it: "[…] a fight with Greek bandits on the plain of Athens is a little classical" ("An American" 1858d, 605). They were the talk of the city, but lucky: normally such bandit groups were said to operate in packs of about twenty. "Wm. C. Grimes" would have approved their actions.

In the final essay, the group follows the path of St Paul by sea and to places on land in southern Asia Minor, including an overnight stay in Tarsus. They then sailed to Larnaka on the southeastern coast of Cyprus, where they had another of those "adventures" that strew their journeys (and any one of which would have been a first-class story for a dinner party). As they arrived at the harbour on their boat, the *Lotus*, they remarked at another sailing vessel approaching, distinctive for its large lateen sail as found in that part of the Mediterranean. Yet again, the Americans spotted "pretty" girls (apparently Greek, since they were unveiled) on-board and laughing cheerfully. As it drifted closer, all the sails except for the lateen were taken down; but a wind caught it, the ship turned over, filled with water instantly, and sank. Strong, followed by John S— and Peter, dived in immediately. Almost matter-of-factly, Peter reports that they rescued two of the girls, but three others were lost without trace; other passengers and crew of the sunken ship managed to scramble onto the *Lotus*, where they proceeded to eat the westerners' dinner! The rescuers were faced with the delicate double dilemma as Victorian men and in an oriental ambience: how to revive the unconscious women, whose clothing was soaked and needed loosening and was already revealing? Even the English surgeon, Benjamin Hall, seemed uncertain. They found a solution in moving the girls away to another part of the boat, leaving them to revive in private! The scene might have made a suitable subject for the soft pornography of Lawrence Alma Tadema.

The girls soon left, without a word of thanks, though the westerners mooned over them for hours afterwards. The next day, however, the father of the two girls arrived to thank them and was especially overjoyed to find it was the work of Americans: "to be a Greek was to love Americans" ("An American" 1858e, 752). He rewarded them with wonderful entertainment ashore for the day, and Stephen Strong thought hard of spending the remainder of his life there. Peter, too, was enchanted by the pretty girls, declaring the "young and middle-aged ladies" of the

Greek Archipelago, Smyrna, Syra, Mytilene, and Rhodes to be "of rare and superb mould and expression" ("An American" 1858e, 752–53).

At the Cycladic island of Syros, a crossroads for steamer-routes, this final article continues in the same manner, detailing Peter's extraordinary chance encounter with a girlfriend from home, travelling on a steamer then in port:

And Peter looked up under the sun-bonnet and ugly [*sic*] that shaded the prettiest face he had seen in a month, and recognized one of the best of little girls from that village that he calls home. And forthwith, disregarding the yellow flag at the fore which announced that the steamer had not-yet received pratique, Peter hoisted himself into the chains and incontinently made his way to the deck and into the arms of the same sweet girl; for if a man may kiss a fair face ever, assuredly it is when he meets one such from a far home, suddenly and joyously in a strange land. Kissing her, I considered myself kissing all the old folks and the young folks of that dear village. It was a representative kiss. I kissed her, first, as respectfully as I would kiss my grandmother's elder sister; and, second, as lovingly as I would kiss my own sister; and, thirdly and fourthly and fifthly and — but never mind the others. It was a glad meeting to all of us. We who had been the inhabitants of a quiet little American village, where there is a saw-mill and an academy with a tinned cupola, and a little old church and grave-yard, and a pond in which the ducks and geese do swim daily, and all that sort of thing, we met on the waters of the Aegean Sea, with the waves of a thousand classic and heroic memories rolling around us ("An American" 1858e, 756).

5. DISCUSSION

There is a great deal more in the same vein. Adventures, sentimentality, vigorous and often aggressive encounters with beduin and bandits, a forthright manner with everyone, and good manly comradeship. The stories are strewn with allusions to people and places an American readership, increasingly familiar with Europe and the Levant, would recognise, from the Pitti Gallery in Florence to the convent on Carmel.

The stories are not entirely invented: in the best traditions, the writer weaves in real people and actual events. Most striking is the puzzling story of Peter's friend with whom he was said to have travelled in eastern Anatolia at an earlier date. Prime had never been to that area. The friend, however, is real enough; in the first essay, anachronistically, Peter alludes to the death of a friend: "Alas for my friend! Already he lies in the dust, sleeping serenely under the shadow of the great mosque at Amida on the Tigris" ("An American" 1858a, 303). Amida was the Roman name of the great frontier fortress city on the Tigris, and in the nineteenth century it was the Ottoman city of Diarbekir (now usually Diyarbakir). The Great Mosque was one of the oldest in the Ottoman Empire, dating from the eleventh century.

Peter returns to this friend in the final essay when he receives mail that had been awaiting him at Syros:

And I heard, too, that my old friend was dead — my fellow traveler in many lands, with whom I climbed the Alps, and afterward tried the snowy sides of Ararat, whose voice I had often heard cheerily across the desert, in our wanderings of old to Sinai and Akabah and along the Tigris; with whom I had lain in starry nights on the Mount of Olives, and heard the song of the morning stars, still clear and glorious as in the morning of creation — as they will verily continue to sing it forever and forever above that hill, and in the heavens when the hill is gone, and Jerusalem shall be but a memory of God's exceeding goodness and glory ("An American" 1858e, 756).

What a journey is implied! Alas, all (presumably) invented. But again he refers to old wanderings which had taken them "along the Tigris"; where he means is not clear: the Tigris rises near Elazig, some 100 km northwest of Diyarbakir. The identity of Peter's friend makes him sound like he may have been a missionary, and an American mission were certainly established in 1857 at "Diarbekir" (cf. Aydın and Verheij 2012, 45).

There is a further clue. In a later edition of Prime's *Tent Life in the Holy Land*, he added an additional page at the end with a report on the travelling companion he had called "Moreright" in his text. Now he says:

Since this book has been in the hands of the printer, I have received most sad intelligence from the East. In writing these pages, I had no opportunity of consulting my friend Moreright as to my use of his true name, which I therefore took the liberty of concealing under this title. I can never consult him now. There are many who will have recognized him in the scenes I have described. There is no one word I have written that I would change now. He was a good friend, an earnest, noble man. He is gone! We parted in Stamboul last May. On the 16th day of December, 1856, having visited Mosul and Nineveh, where we had hoped to be together, he died at Diarbekir, and was buried on the bank of the Tigris. I would there were space for more. This brief page contains not room to record his virtues. However distant and diverse may be my wanderings, I shall never forget the companion or my pilgrimage to Jerusalem, the sunshine or our pleasant journeyings together, and our months of Tent Life in the Holy Land (Prime 1857b, 498).

A hand-written annotation in one of the digitised copies, explains that "Moreright" was "Righter", that is, Chester Newell Righter (1824–1856), an earlier companion in the Near East to Prime's brother, Samuel Irenaeus Prime, who had been wounded when defending Samuel from beduin in Palestine. He was a highly regarded missionary, attracting laudatory obituaries and the publication of his memoirs by Prime's same brother (S.I. Prime 1859). Prime's obituary explicitly referred to them having travelled together from Alexandria until parting ways at Constantinople (*apud* S.I. Prime 1859, 329–30). He is commemorated on an epitaph in his hometown of Parsippanny in Morris County, New Jersey, which reads: "CHESTER N. RIGHTER, / BORN / SEPTEMBER 5TH. 1824. / DIED / DECEMBER 16TH. 1856. / AT DIARBEKIR, / ASIA MINOR: / WHILE AGENT OF THE / AMERICAN BIBLE SOCIETY" (Vail Memorial Cemetery). Evidently, Peter brought into his story a real person and, in the process, given additional support to the idea that the writer is William Cowper Prime.

6. STYLOMETRIC ANALYSIS

Stylometric analysis of the "Peter" essays (Table 1, nos. 15–19) strengthens the arguments for Prime's authorship. For authorship attribution, such analysis requires a corpus of texts that are then mined for stylistic patterns to generate authorial profiles, from which statistical inferences may be drawn as to the likely authorship of the anonymous samples. For our purposes, a corpus of select American accounts of travel in the Holy Land and Near East published between 1848 and 1869 was constructed (Table 2). While it is not exhaustive,[1] the resulting corpus is nonetheless diverse, containing texts by celebrated literary figures of the day (Mark Twain and Bayard Taylor), missionaries (James T. Barclay, Sarah Barclay Johnson and William McClure Thomson), women (Sarah Barclay Johnson, Caroline Paine, and Prime's wife, Mary), a lawyer (John B. Ireland), a naval officer (William F. Lynch), and an Irish-born American government agent (J. Ross Browne).

Texts in the corpus were segmented into non-overlapping blocks 2,000 words in size, with any surplus discarded to ensure analysis of consistent proportions (see Table 2).[2] Proper names and foreign-language words were excluded from the analysis, as is standard practice in authorship attribution, because these features are more closely related to local, text-specific contexts rather than indicative of any consistent authorial style.

The first issue to consider is whether the author of the anonymous "Peter" essays is in fact present in the corpus. This is known as determining whether one is dealing with an "open" or "closed" set problem: in a "closed" set attribution problem, the texts under investigation are known to have been authored by a candidate represented in the corpus; in an "open" set

TABLE 2:   The "Peter" essays and other American travel accounts to the Holy Land and Near East published between 1848 and 1869

Author	Title	Date	Text selection	Words
("An American")	"An American at Sinai"	1858a	Complete	8,000
("An American")	"An American in Constantinople"	1858b	Complete	6,000
"An American"	"Islands and Shores of Greece"	1858c	Complete	6,000
"An American"	"From Sinai to Wady Mousa"	1858d	Complete	8,000
"An American"	"The Voyage of Paul"	1858e	Complete	8,000
Barclay, James T.	*The City of the Great King*	1858	Chapters 15–16	12,000
Browne, J. Ross	*Yusef*	1853	Chapters 12–25, 29	14,000
Ireland, John B.	*From Wall Street to Cashmere*	1859	Chapters 5–8, 11	10,000
Johnson, Sarah Barclay	*Hadji in Syria*	1858	Chapters 1–3	10,000
Lynch, William F.	*Narrative of the United States' Expedition to the River Jordan and the Dead Sea*	1849	Chapters 8, 18–21	20,000
Paine, Caroline	*Tent and Harem*	1859	Chapters 1–7	12,000
Prime, Mary	*Nile Journeys*	1998	Chapters 1–15	44,000
Prime, William Cowper	*Boat Life in Egypt and Nubia*	1857a	Complete	134,000
Prime, William Cowper	"Passages of Eastern Travel" (parts 1–9)	1856	Complete	84,000
Prime, William Cowper	*Tent Life in the Holy Land*	1857b	Chapters 1–4	16,000
Taylor, Bayard	*The Lands of the Saracens*	1855	Chapters 1–11, 28–32	52,000
Thomson, William McClure	*The Land and the Book*	1859	Chapters 1–6	16,000
Twain, Mark	*The Innocents Abroad*	1869	Chapters 1–20, 41–49	80,000

problem, the author may or may not be present.[3] While there can never be absolute certainty that the true author is represented in a corpus, external evidence notwithstanding, we can, under certain circumstances, determine whether the author is *not* present. Visual inspection of a principal component analysis (PCA) plot is one method of determining whether the text of the "Peter" essays is very different from those of the other authors represented in the corpus.[4] Counts of the 500 most frequent words in all of the segments are projected into a "space" discovered by PCA: texts by the same author cluster together within this space; where a text lies on the edges of this domain, it is either a stylistic outlier — such as a text of anomalous genre or period of composition — or an indication that its true author is outside the corpus (Schaalje *et al.* 2011, 75).
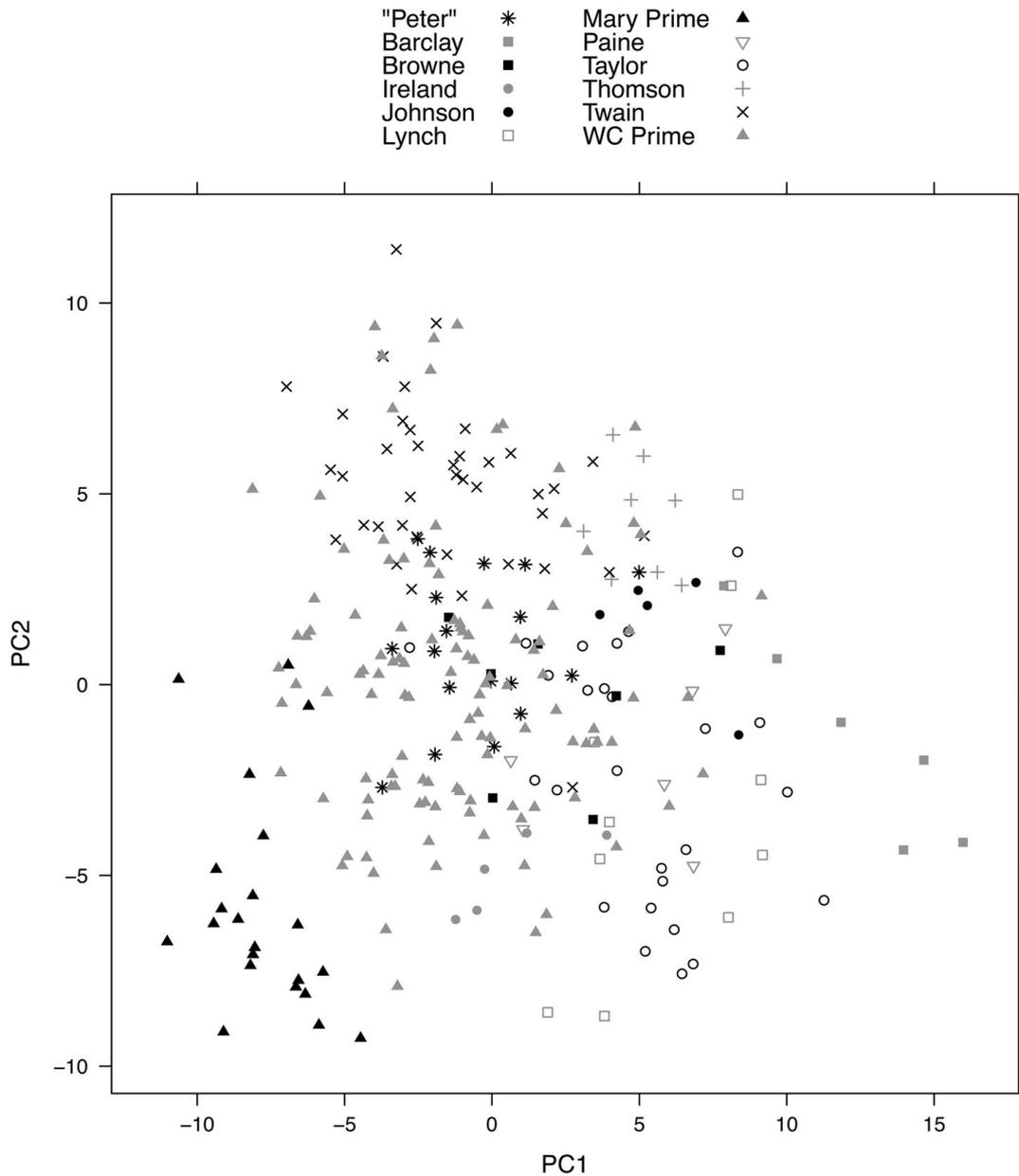
Fig. 1.   PCA scatterplot of the 500 most frequent words using 2,000-word non-overlapping segments of the "Peter" essays and American travel accounts to the Holy Land and Near East published between 1848 and 1869.

A PCA scatterplot of the 500 most frequent words (Fig. 1) reveals two important insights into our corpus. First, the "Peter" essays are not stylistic anomalies, with their segments (plotted as black asterisks) loosely clustering in the centre alongside segments by others of known authorship. While PCA does not allow us to conclusively determine if the author of the "Peter" essays is present in the corpus, it can definitively demonstrate the author's absence. The "Peter" essays are not stylistic outliers: the hypothesis that the author or authors of the essays lie somewhere within the corpus cannot be rejected with this method. Second, Mary Prime is clearly delineated as an outlier, with her segments (plotted as solid black triangles)

clustering together away from the rest of the corpus. All of the texts in the corpus belong to the same genre (travel writing), with roughly contemporaneous dates of composition and publication (between 1848 and 1869) — with one possible exception. As detailed above, Mary Prime accompanied her husband, her brother, and her brother's wife on a tour of the Middle East from 1855 to 1856. Mary kept journals, which remained unpublished until Charles Derowitsch obtained them at auction. Derowitsch published selections from the journals in 1998 under the title *Nile Journeys*, declaring in the preface that he had "edited, revised and rewritten" them (M.T. Prime 1998, i). The absence of any scholarly apparatus indicating where Derowitsch made such editorial emendations renders it impossible to establish the extent of his revisions and rewritings with any accuracy; any attributions to Mary Prime made on the basis of this "edition" of her writing should therefore be treated with caution. Derowitsch's textual interventions, made some 140 years after the likely composition of the journals, offer one possible explanation of why the Mary Prime segments are stylistically anomalous. Another possibility, of course, is that Mary Prime's authorial "voice" is simply more distinctive than the rest of the writers represented in the corpus. However, until the journals from which *Nile Journeys* is derived are made available in facsimile or in a scholarly edition, we cannot determine whether its stylistic markers belong more properly to Mary Prime or to her twentieth-century editor.

For stylometric analysis of the "Peter" essays, two robust computational methods are employed: Random Forests and Zeta. As readers may not be readily familiar with these techniques, they are briefly described before the results of their analysis are given. Random Forests is an ensemble machine-learning algorithm that deploys a large number of decision trees to classify samples into known categories (Breiman 2001). Decision "trees" are sets of rules generated in reference to data variables, organised into a hierarchy. In Random Forests, these trees are grown using binary partitioning, that is, each parent node is "split" into no more than two children. For example, in classifying a 2,000-word text segment as belonging to author A or B, a single decision tree might include the following rule according to the frequency of the words *boat*, *the*, and *water*: if the proportion of the word *boat* in the segment is less than 0.455, and the proportion of the word *the* is greater than 0.65 or the proportion of the word *water* is less than 0.032, then the segment is classified as belonging to author A; in all other cases, it is classified as author B's. Hundreds of such decision trees are generated, each using a different and random subset of 2,000-word text segments and words. A proportion of segments and words — by default, a third — are "held out" from this process, so that they can be tested against the decision trees, giving an expected error rate for the predicted classifications. While its use in authorship attribution problems is still quite new, the technique has met with success (Elliott and Hirsch 2016; Tabata 2014).

The confusion matrix of the Random Forests classifications using the 500 most frequent words is given as Table 3. All of the segments of the "Peter" essays were held out. Five hundred trees trying eighty-eight random variables at each "split" generated an expected error rate of 17.93 percent. Given the number of available authorial candidates (eleven), this is an acceptable estimated error rate. Table 3 also gives the misclassification ratio for each authorial candidate. Notable for our present purposes is the zero percent misclassification ratio for segments belonging to William Cowper Prime; however, the successful classification of his 117 segments must be tempered by the attribution of 16 segments by other authors to him.

The "Peter" essay segments (previously "held out" and unseen by the algorithm) are then introduced and classified. Trained using 500 most frequent words, Random Forests consistently classifies all segments of the "Peter" essays as belonging to William Cowper Prime (see Table 4).

Zeta is a method used to identify characteristic features of two comparison text sets in order to infer stylistic distance between them and thereby classify "hold out" and test segments

TABLE 3: The Holy Land and Near East published between 1848 and 1869, with misclassification ratios for each authorial candidate

	Barclay	Browne	Ireland	Johnson	Lynch	Paine	Prime, M.	Prime, W.C.	Taylor	Thomson	Twain	Misclassification ratio
Barclay	3	0	0	0	1	1	0	0	0	0	1	0.500
Browne	0	0	0	0	0	0	0	3	3	0	1	1.000
Ireland	0	0	0	0	0	0	0	5	0	0	0	1.000
Johnson	0	0	0	0	1	0	0	0	4	0	0	1.000
Lynch	0	0	0	0	3	0	0	0	7	0	0	0.700
Paine	0	0	0	0	0	4	0	0	1	0	1	0.333
Prime, M.	0	0	0	0	0	0	22	0	0	0	0	0.000
Prime, W.C.	0	0	0	0	0	0	0	117	0	0	0	0.000
Taylor	0	0	0	0	0	0	0	6	19	0	1	0.269
Thomson	0	0	0	0	0	0	0	2	1	2	3	0.750
Twain	0	0	0	0	0	0	0	3	0	0	36	0.076

TABLE 4:   Random forests attributions of the "Peter" essays, trained on prediction models using the 500 most frequent words in the corpus of American travel accounts to the Holy Land and Near East published between 1848 and 1869

Title and segment no.	Classification
"An American at Sinai" (1)	William Cowper Prime
"An American at Sinai" (2)	William Cowper Prime
"An American at Sinai" (3)	William Cowper Prime
"An American at Sinai" (4)	William Cowper Prime
"An American in Constantinople" (1)	William Cowper Prime
"An American in Constantinople" (2)	William Cowper Prime
"An American in Constantinople" (3)	William Cowper Prime
"Islands and Shores of Greece" (1)	William Cowper Prime
"Islands and Shores of Greece" (2)	William Cowper Prime
"Islands and Shores of Greece" (3)	William Cowper Prime
"From Sinai to Wady Mousa" (1)	William Cowper Prime
"From Sinai to Wady Mousa" (2)	William Cowper Prime
"From Sinai to Wady Mousa" (3)	William Cowper Prime
"From Sinai to Wady Mousa" (4)	William Cowper Prime
"The Voyage of Paul" (1)	William Cowper Prime
"The Voyage of Paul" (2)	William Cowper Prime
"The Voyage of Paul" (3)	William Cowper Prime
"The Voyage of Paul" (4)	William Cowper Prime

accordingly (Burrows 2006; Craig and Kinney 2009). The technique has been used to identify lexical words typical in William Shakespeare's plays but atypical in those of his contemporaries, and *vice versa*, using the relative distribution of these comparative "marker words" to classify test segments from plays of contested authorship (e.g. Craig 2009; Elliott and Hirsch 2016; Watt 2009). With the "hold out" and test segments excluded, the first step in the procedure is to select a list of marker words for each comparison set (e.g. a "William Cowper Prime" set and a "not William Cowper Prime" set). The algorithm assigns an index score to all of the words in both sets for the comparative distinctiveness of their use; the top 500 of these ranked index words are selected as "markers" for each comparison set. Each segment, including the "hold out" and test segments, is then assigned a score based on the proportion of marker word-types against the total number of word-types in it, which are then plotted along two axes of a scatterplot. A perpendicular "bisector" line is drawn at the mid-point between the centroids of the comparison set clusters, allowing the test segments to be classified according to their relative position.

The corpus is therefore split into three sets: a William Cowper Prime training set containing all segments of his texts, minus a random 10 percent to be "held out" to validate the procedure; a "not William Cowper Prime" (or, for the sake of convenience, "Others") training set containing all segments by other authorial candidates together, minus a random 10 percent to
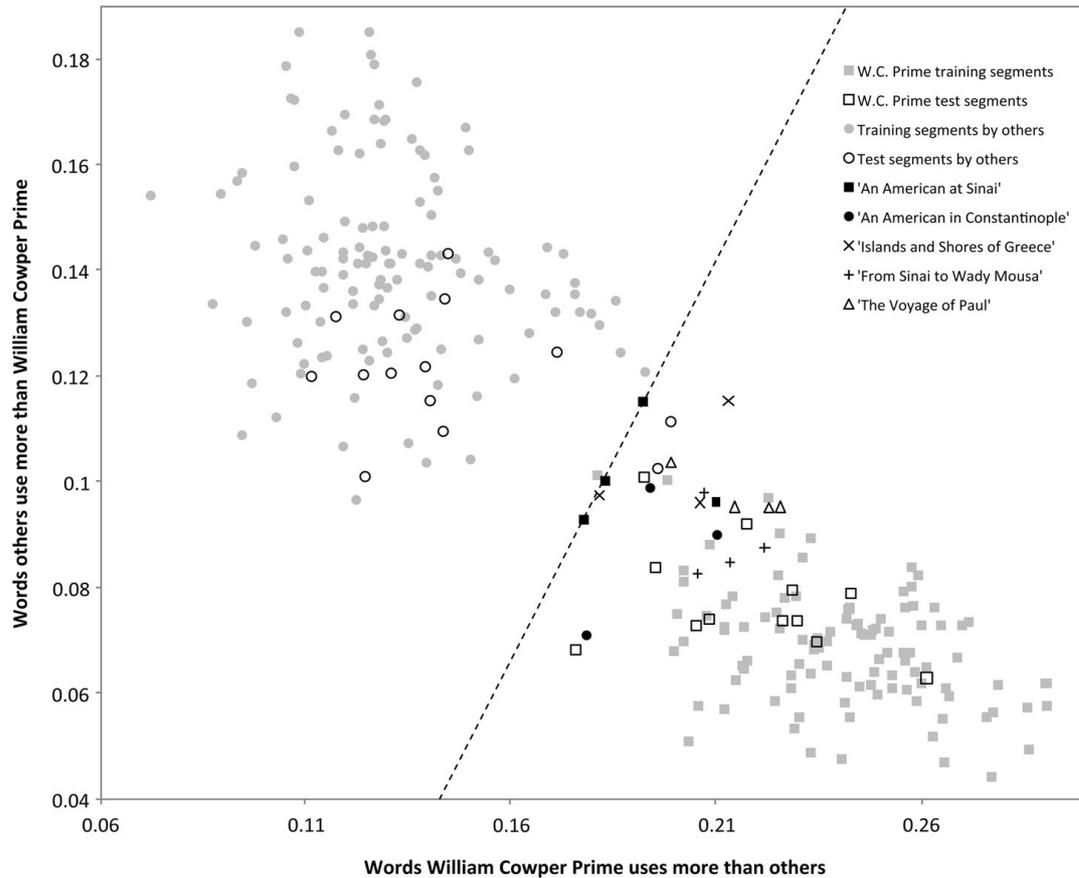
Fig. 2.   Zeta scatterplot of proportions of 500 marker words using 2,000-word non-overlapping segments of William Cowper Prime's texts against all other segments of known authorship in the corpus of American travel accounts to the Holy Land and Near East published between 1848 and 1869, with randomly selected test segments and the "Peter" essay segments.

be "held out" (again, for validation); and a test set, containing the "held out" segments and the "Peter" essays.[5] The algorithm assigns an index score to all of the words in both "William Cowper Prime" and "Others" training sets based on their comparative distinctiveness, and the top 500 of these are selected as "markers" for each set. The words *boat, river, travelers, instant, silent, length, bank, lay, sprang,* and *sand* head the list of "William Cowper Prime" markers, whereas the words *upon, mount, however, several, whole, things, pretty, cannot, anything,* and *beautiful* head the list of markers for the "Others". A score is then assigned to all segments, including those in the test set, based on the proportion of "William Cowper Prime" and "Others" marker word-types against the total number of word-types in each, which are then projected along two axes of a scatterplot with the bisector line drawn at the mid-point between the two centroids (Fig. 2).

　　The Zeta algorithm correctly classifies all but one of the "William Cowper Prime" training segments (plotted as gray squares) — segment 6 of *Tent Life in the Holy Land*, which is plotted just over the bisector line; all of the "William Cowper Prime" test segments (plotted as hollow black squares) are classified correctly. All of the "Others" training segments are correctly classified, as are all but two test segments (plotted as hollow black circles) — segments 7 and 9 of *Nile Journeys*.

Zeta classifies all segments of the "Peter" essays as closer in style to "William Cowper Prime", plotting none of the segments on the "Others" side of the bisector line. Three segments from "An American at Sinai" (1858b; plotted as black squares) and one segment from "Islands and Shores of Greece" (1858d; plotted as black crosses) have the least stylistic affinity and are plotted closest to the bisector line; the remaining segments from the "Peter" essays cluster more closely to the centroid of the "William Cowper Prime" segments.

7. CONCLUSION

Mitchell's "Bibliography of Exploration" attributes three anonymous essays published in *Harper's New Monthly Magazine* in 1858 to William Cowper Prime: "An American at Sinai" (1858b), "From Sinai to Wady Mousa" (1858c), and "The Voyage of Paul" (1858e; Mitchell 1887, 311). Internal and external evidence confirms these essays are part of a longer series of five, and that the same author composed them all: William Cowper Prime. Stylistic analyses of a diverse corpus of American travel accounts of the Holy Land and Near East, published between 1848 and 1869, consistently attribute the essays to Prime. Although all of the essays have been accepted as factual reports of actual events, places, and people, analysis of the chronology and frequently implausible content leave little doubt they are fictitious and should not be treated as historical sources. In the light of these conclusions, one must also re-evaluate Prime's books, *Boat Life in Egypt and Nubia* and *Tent Life in the Holy Land*. Mark Twain was scathing about their reliability, and the new evidence of Prime's subsequent writings reinforces his propensity not just for exaggeration, but also outright invention.

8. POSTSCRIPT

We may note — drawn to our attention by a reviewer — that Prime's brother-in-law, the Rev. Henry Clay Trumbull (1830–1903), seems to have been equally prone to gushing prose and fantastic descriptions and interpretation. He was regarded by contemporaries as a major authority on biblical matters and drew a posthumous biography of some 550 pages (Howard 1905). One of Trumbull's many books was *Kadesh-Barnea*, 500 pages built around his supposed discovery of this long-sought biblical site (Trumbull 1884). A generation later, two more sober investigators were scathing in their report of his visit:

[…] a Mr. H. C. Trumbull, an American, spent a single hour at the spring in 1882, and wrote round his visit a very large book, with fantastic descriptions of the valley and wells. The work, however, was plausible, and has unfortunately been accepted by biblical geographers as the authority on the district. As for the remainder of Trumbull's book, it is full of varied argument, often irrelevant, some philology, and a large confrontation of the views of everyone, good or bad, who had mentioned Kadesh-Barnea throughout the ages. […] As a general comment we can only say that this account is as minutely accurate in its measurements as it is inaccurate in its descriptive matter (Woolley and Lawrence 1914, 52–57).

NOTES

[1] On American travel writing about the Holy Land more generally, see Davis (1996), Long (2003), McBride (2004), Obenzinger (1999, 2009), Oren (2011), Robey (2009), Rogers (2011), Vogel (1993), and Yothers (2007).
[2] These methods can be reliably used on a minimum sample of 2,000 words (Burrows 2003, 21).

[3] On modern methods of authorship attribution more broadly, see Love 2002; for a technical discussion of methods, see Juola (2006).
[4] Principal Component Analysis is well established as a data reduction method for multivariate analysis; see Chatfield and Collins (1980, 57–79). For a gentle

introduction to the procedure, see Alt (1990, 48–80). On the use of PCA for authorship attribution, see Binongo and Smith (1999).

[5] The twelve random "hold out" segments from the "William Cowper Prime" training set include segments 14, 21, 47, 49, and 53 of *Boat Life in Egypt and Nubia*, segments 5, 10, 15, 17, 27, and 40 of the "Passages of Eastern Travel" articles, and segment 3 of *Tent Life in the Holy Land*. The 14 random "hold out" segments from the "Other" training set include segments 2, 9, 10, 11, 13, 27, and 36 of Twain's *The Innocents Abroad*, segments 1 and 3 of Lynch's *Narrative*, segments 3, 7, 9, and 11 of Mary Prime's *Nile Journeys*, and segment 2 of Taylor's *The Lands of the Saracens*.

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