Empire, Exploration and 'Failure': The Euphrates Expedition and the Route to India that Never Was

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Empire, Exploration and 'Failure': The Euphrates Expedition and the Route to India that Never Was

In the early nineteenth century, Suez was not the only possibility for a shortcut between Britain and its rapidly expanding Indian empire. Serious consideration was also given to a route via Mesopotamia. In 1835, the lavishly funded Euphrates Expedition set out to determine the suitability of the river for steam navigation, assess the political complications, and complete maps and natural historical surveys. The Expedition began with an extraordinarily laborious overland transport through Syria, hauling two dismantled steamships across the desert, a process resisted by both Ottoman and Egyptian authorities. Things did not become much easier upon reaching the river, and a series of calamities ensued, most significantly the complete loss of one of the steamers in a hurricane. In this article, I use the Euphrates Expedition to consider various notions of 'failure' and breakdown in the histories of empire, science and exploration. In terms of everyday expeditionary practice, the Expedition might be seen as a series of cascading failures, from cross-cultural negotiation to technological limits, and it was in another sense an imperial 'failure' as 'the route to India that never was.' At the same time, this article interrogates a tension in the historiography around what it means to tell the story of imperial exploration and surveying as one of limits, confusion, vulnerability and dependency – or ultimately 'failure' – given the often pervasive legacies and consequences of these activities for the places and peoples surveyed.

Keywords: empire, Euphrates River, exploration, failure, labour, Mesopotamia, steamships, Suez Canal, surveying, technology

Introduction

In the second quarter of the nineteenth century, Suez and the Red Sea was not the only possibility for a much-desired shortcut between Britain and its rapidly expanding empire in India. Serious consideration was also given to establishing a route through Mesopotamia and the Persian Gulf. To investigate this, the Euphrates Expedition set out in 1835 to determine the suitability of the Euphrates River for steam navigation. Lavishly funded by the British government, its remit was to lug two dismantled ships

across the Syrian desert, reassemble them, and then steam down to the Gulf and back up again. The Expedition, under the command of Irish-born Royal Artillery officer Francis Rawdon Chesney (1789-1872) mobilised a large and diverse array of participants, including engineers, officers, naturalists, translators, surveyors, brokers, labourers, and local river pilots, as well as tonnes of material (which alongside the experimental steamships, included Congreve rockets, an extensive library, and a diving bell). Almost from the outset, the Expedition was beset with calamities and breakdowns, many of them resulting from the active and creative resistance by Ottoman and Egyptian authorities, as well as local workers. It also ran into technological and environmental difficulties, and by the time the Expedition was formally disbanded two years later, one ship had sunk in a hurricane, the other had a broken engine, and more than twenty-five of its members were dead. Meanwhile, its primary question – whether the Euphrates was reliably navigable by steamships – remained largely unresolved.

The Expedition was quickly written off by most authorities in Britain and India as an expensive failure, and hopes for a new route to India gravitated ever more firmly to the Red Sea. That the Euphrates Expedition is less well known today is perhaps to be expected; after all, the Suez Canal changed the world, and continues to carry vast geopolitical and economic importance. This is also reflected in the historiography, where the Euphrates Expedition tends to be relegated to a footnote in the histories of Suez or wider imperial competition in Mesopotamia, and is often referred to as a 'failed experiment.' In a broader study of steam in Mesopotamia for example, Jonathan Parry refers to the Expedition as a 'quixotic attempt' that ultimately 'met with delay and then disaster.'[1] Elsewhere, Parry nevertheless suggests that 'the Euphrates Expedition was much more useful to Britain as a failure than it would have been as a success: a navigable route would have made Mesopotamia much more desirable to other powers.'[2]

Meanwhile, Camille Cole also notes 'the failure of Francis Rawdon Chesney's 1836 mission,' but uses it primarily as a useful starting point for discussing economic and environmental concerns around steam shipping later in the nineteenth century.[3]

Despite its relative obscurity, in this article I am less interested in recovering all of the ins and outs of the Expedition, and rather more in the way that histories of imperial 'failure' leave complicated legacies. In particular, I use the Euphrates Expedition to consider various notions of 'failure' and breakdown in the history of science, exploration and empire. Here the Expedition provides an instructive case study (and a wealth of material), encompassing a smorgasbord of different forms of failure; including most fundamentally on its own terms, in failing to achieve several of its stated objectives (notably, both descending *and* ascending the river). In terms of everyday expeditionary practice, the Expedition might also be seen as a series of cascading failures, from the breakdown of cross-cultural negotiations to the exposure of technological limits. Similarly, it represents a failure of public relations (of central importance to exploration in this period), as both the Indian and British authorities, and the press, largely came to see it as a 'failed experiment,' and an embarrassing waste of money (in some cases well before it had even concluded). Finally, it was in another and wider sense an imperial 'failure,' ultimately becoming the 'loser' of the Euphrates/Suez equation and 'the route to India that never was.' Of course, these notions of 'failure' are all highly subjective, and from the perspective of the Ottoman and Egyptian authorities who variously engaged with and opposed the Expedition, its ignominious fate was far from an undesired outcome.

Matters of perspective aside, speaking through the lens of failure is also potentially anachronistic, which is why in what follows I focus primarily on contemporary assessments by Expedition members, authorities in both India and

Europe, and commentors and the press more widely. That said, I also engage with the way that in recent years, historians of science have become particularly interested in questions of 'failure,' breakdown and repair (especially in relation to scientific instruments and networks).[4] Historians of technology meanwhile, have for much longer looked at the role of failure in innovation (including in relation to imperial technologies like steamships and the telegraph).[5] Similarly, the imperial utility of 'failure' has attracted attention, and here Felix Driver and Luciana Martins have shown that while failures could bring 'into question the capacity of the British to act at a distance' they might also provide the 'opportunity to mend and indeed strengthen the networks of power and knowledge.'[6] Meanwhile, historians, geographers and literary scholars have been drawn to especially questions of 'heroic failure' and 'disaster' in exploration, from the infamous disappearance of the Franklin Expedition to Robert Falcon Scott's Antarctic demise.[7] Here Stephanie Barczewski argues that 'heroic failure' was a peculiarly British obsession, and 'neither reflected nor engendered decline' but 'on the contrary, it arose from British power and dominance' and played an important role providing 'alternative narratives of empire that distracted from its real-life exploitative and violent aspects by emphasizing an idealized version of the nation's character.'[8]

Indeed, there is a distinct danger in considering these sorts of imperial expeditions and ventures through a lens like 'failure' (even where acknowledging its imperial utility). This article thus interrogates a tension in recent historiography around what it means to tell the story of imperial science, exploration and surveying as one of limits, confusion, vulnerability, dependency on local expertise – or ultimately 'failure' – given the often pervasive legacies and consequences of these activities for the inhabitants of the regions surveyed. This stems from the way that, in recent years, scholars have convincingly demonstrated that imperially-motivated explorers and

surveyors were often not able to act out their assumed superiority. For example, Dane Kennedy has pointed out that explorers 'were often weak and vulnerable' and 'far from demonstrating the great power of the British Empire, explorers in fact discovered its limits,' especially when their survival depended on local assistance.[9] Ultimately then, they 'can be characterized as the instruments of a triumphalist British civilization exerting its influence ... only if we willfully ignore the fact that many of these expeditions were abject failures.'[10] There is much that is laudable in these revisions of the history of imperial science and exploration, not least in revealing the extent of dependence on local labour and expertise and thereby redistributing agency. However, these expeditions also had real consequences, both immediate and in the much longer-term for those individuals and groups on whom the explorers depended. Emphasising vulnerability, confusion and failure might thus inadvertently have the opposite effect intended, serving to minimise the violence of imperial exploratory practices, and undercut the legacies of the knowledge, maps, surveys, and brokerage networks they produced.

While primarily focusing on narratives of vulnerability and mastery, it is therefore also necessary to trace the way the Euphrates Expedition provides insight into the highly multifaceted nature of imperial surveying projects in the nineteenth century. Indeed, along with its primary goal of establishing a new route to India, the Expedition was simultaneously a sprawling knowledge gathering exercise. As Chesney explained before they set out in 1835: 'the objects to be accomplished by the expedition are so numerous that the enterprize must not be considered as having any one specific character.'[11] This expansive remit included establishing trade relations, conducting astronomical, topographical and natural historical surveys, completing military and engineering assessments, and expanding diplomatic relations. Chesney also noted that

'requests were made by some members of the Geographical Society, the Asiatic, and others, for some notices from time to time.'[12] (This latter task was also facilitated by the serendipitous addition of pair of married Austrian naturalists, Johann and Pauline Helfer, who were in Syria already and joined the steamships for the descent.[13]) There was nevertheless friction between the Expedition's more abstract scientific aims and the expensive and strategically imperative mission of completing detailed maps, establishing relations with the Arab inhabitants, and opening a route between India and Europe. Indeed, as a letter from the President of the Board of Control, Lord Ellenborough, reminded Chesney at the outset of the Expedition: 'you will always bear in mind that that is the one object of your Expedition, and that scientific enquiries, however interesting, are not to be allowed to detain you.'[14]

These overlapping interests ultimately demonstrate the holistic extent to which the Expedition sought to categorise, appropriate and define the natural historical makeup, environmental potential, economic future, and political and cultural configuration of Mesopotamia and its rivers. Such varied (and sometimes contradictory) purposes also highlight evolving imperial information orders in the first half of the nineteenth century, and the wider ambitions of the 'second' British Empire.[15] Perhaps just as significant as these attempts to extract information, however, was the way the Expedition sought to establish and develop networks of river pilots, wood cutters, brokers, translators and informants which, along with the knowledge gathered, all had significant afterlives beyond the alleged 'failure' of the Expedition to open a new route to India, calling into question any such simplistic contemporary assessments.

In focusing on the tension between vulnerability, failure and violence in imperial science, geography and exploration, this article does not present a comprehensive account of the Euphrates Expedition (although there is certainly scope for more

sustained and critical attention). Indeed, the most extensive history of the Expedition itself remains that by John Guest, a lively and detailed account, but one that is ultimately more narrative than analytical.[16] More recently, Haim Goren has engaged with the Expedition (taking a particular biographical interest in Chesney), concluding that even though issues perhaps 'could have been foreseen' this ultimately 'does not change the heroic narrative of a group of stubborn officers, soldiers and civilians … overcoming endless setbacks caused by natural and human factors.'[17] This is of course one – and perhaps the traditional – way of viewing things, but this article argues for a different approach. It does not deny that Chesney and his crew (and their many Arab assistants) endured considerable hardships, or that hauling two steamships across a desert is not, in some sense, a remarkable feat in and of itself. Instead, it seeks to highlight the aspects of the story overlooked (much as those doing the actual hauling), as well as the tension between narratives of vulnerability and failure, and the violence of such imperial ventures; all of which are submerged in classic exploration historiography (and much popular history today) with their penchants for heroic (or antiheroic) stories of adventure.[18]

In what follows, I trace the Expedition in a roughly chronological fashion, beginning by placing the competing routes to India in their wider imperial contexts, and relating these to the historiography on steamships as technologies of empire. This is followed by a consideration of the Expedition itself, beginning with the various breakdowns in political negotiations and cross-cultural labour relations during the overland transport. Next is a consideration of tropes around the 'moral power' of technology, followed by a discussion of how imperial mastery was undercut by everyday reliance on local river guides. I then discuss the Expedition's greatest 'objective' failure – the loss of the *Tigris* steamer – and examine how other

technological travails, especially around fuel, could deepen dependency. Finally, I consider the end of the Expedition, contemporary assessments of 'success' and 'failure,' and various missteps around publicity and the press. Ultimately, this allows for a reflection on the implications of viewing the history of imperial expeditions, surveying and science through lenses like vulnerability and 'failure' given their legacies for the peoples and places surveyed.

A Faster Way to India: The Imperial and Technological Contexts of the Expedition

Across the first decades of the nineteenth century, questions about a quicker route between Britain and India became increasingly pressing. The conventional Cape route went around the southern tip of Africa, but usually took at least five months, and was not without peril. Occasionally people, goods and mail already passed to India overland via the 'direct' or 'desert' routes, usually encompassing Aleppo, Baghdad and Basra (or sometimes via Egypt), but these were far from entirely reliable or straightforward, and could anyway never hope to operate at the scale required.[19] Authorities in London and administrators in Bombay and Calcutta were thus eager to develop a new route, and ideally one harnessing the gleaming promise of steam. Of course, historians have to luxury of skipping the end of the story, and we know that the Suez Canal became the solution. In the first decades of the nineteenth century this was not obvious, however, and the Suez route was thought to have some notable difficulties (initially around erroneous height measurements that seemed to rule out a canal, and later around the great difficulty navigating the Red Sea during the months of the monsoon).[20] As a result, serious consideration was given to multiple routes; not only as competing

alternatives for a new highway to India, but also to potentially to operate simultaneously and complement each other at different seasons (see Figure 1).

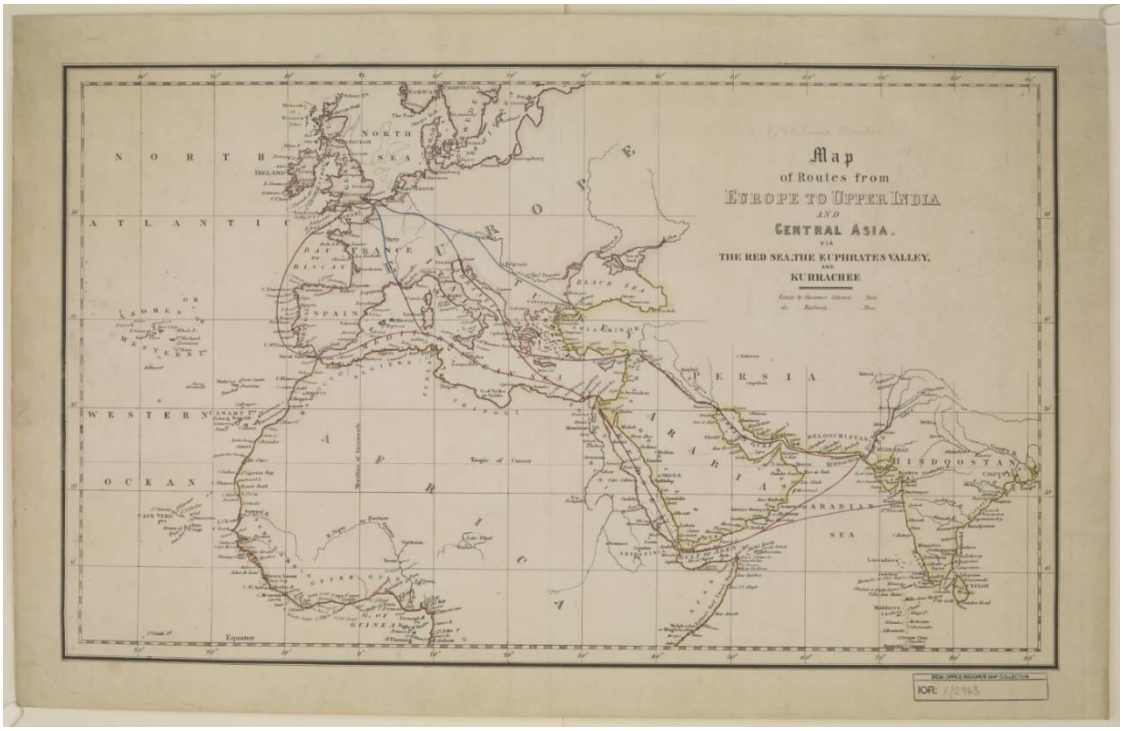

Figure 1 'Map of Routes from Europe to Upper India and Central Asia, via the Red Sea, the Euphrates Valley and Kurrachee' (c. 1850). Image: British Library, Map Collections, IOR/X/2963.

The Red Sea route might have had its challenges, but the Euphrates was also considered problematic on several fronts. In particular, it was thought to have more obstacles politically, with the need to negotiate not only with the Ottomans who had ostensible authority in the region (though in practice usurped to a significant extent by an expansionist Egypt), but also bring onside a bewildering array of Arab sheikhs along the river (whose support was essential not least for maintaining sufficient fuel depots to power the steamships).[21] This wider political context nevertheless also played a central part in arguments in favour of the Euphrates route, which were wrapped up in concerns with Russian designs on India via Persia and Central Asia, as part of the so-called 'Great Game' writ large.[22] Indeed, in the 1830s, Mesopotamia in general – and shoring

up and expanding the influence of the Pashalik of Baghdad in particular – came to be seen as having an important bearing on these geopolitical stratagems, with arguments that British flagged steamers were urgently needed on the Euphrates to pre-empt any similar move by Russia.[23]

Beyond trans-imperial rivalries, the Euphrates Expedition also reflected intra-imperial frictions within the British Empire, particularly between His Majesty's Government in Britain, and the East India Company (EIC) in India. Here the role of the so-called Indian 'sub-empire' – i.e. spheres of influence emanating from Bombay and Calcutta rather than London directly – presents an important and sometimes overlooked dimension.[24] Tensions manifested especially around the ever thorny question of money, with the EIC arguing that having covered the whole – and much greater – expense of the Red Sea experiments, it was only fair that the British government should cover the Euphrates trial.[25] It was understood the expense of maintenance should ultimately be equally divided whichever route was selected, but in the interim the EIC steadfastly refused to financially support surveys of the Euphrates.[26] (These intra-imperial dynamics also had a bearing on relations between Calcutta and Bombay, given that either of the new routes would potentially reshape the balance of power in the Presidencies towards Bombay).

Central to the investigation of both routes was the application of the still relatively new technology of steam shipping, which offered an apparent panacea for the many problems of distance and scale in an increasingly interconnected global empire like that pursued by Britain. Scholars have long been interested in the role of technology in empire, and here the cultural, social, economic, military and political implications of steamships often form a central case study.[27] The classic case, as stated by Daniel Headrick, is that 'few inventions of the nineteenth century were as important in the

history of imperialism.'[28] Subsequently, however, scholars have pushed back against this, and convincingly argued that in many cases the impacts of steam have been overstated before the later part of the nineteenth century.[29]

It was thus with an overlapping – and not always aligned – combination of political, economic, scientific and technological considerations in mind, that a Select Committee on Steam was set up in the House of Commons in 1834 to weigh the merits of both the Red Sea and Euphrates routes.[30] While the EIC and others continued to push for the Red Sea, the Euphrates route nevertheless had its ardent supporters in London, championed by Chesney (who achieved a considerable coup in exciting the King towards the idea).[31] In the end, the Steam Committee's report ran to hundreds of pages for and against both options, but these were distilled into a dozen resolutions. The ninth of these was 'that there appear to be difficulties on the line of the Euphrates' but these were not insurmountable, and 'this route, besides having the prospect of being less expensive, presents so many other advantages, physical, commercial and political, that it is eminently desirable that it should be brought to the test of a decisive experiment.'[32] The Committee thus voted, as its twelfth and final resolution, the dramatic sum of £20,000 to allow Chesney to conduct a trial descent and ascent of the Euphrates 'with the least possible delay.'[33] Two steamships – the *Euphrates* and *Tigris* – were duly commissioned, and the Expedition began.

The Overland March Resisted: Laborious Achievement or Litany of Failure?

In April 1835, the Expedition, with all its sprawling apparatus and personnel, landed on the Syrian coast. The next step was an enormous and labour intensive undertaking, to cross the desert from the Mediterranean to the Euphrates, some 140 miles away. There remains some doubt as to why Chesney chose to start overland at all. Assembling the

ships in the Gulf and steaming upriver first might have made more sense (an opinion which was expressed by the shipbuilder, Macgregor Laird).[34] Chesney apparently believed that starting at Birecik was the quicker way (skipping the need to round the Cape), and also argued that it was the more manageable option politically. However, he may also have recognised that his incomplete earlier reconnaissance survey was perhaps overly optimistic (particularly in relation to the lower river and the notorious Lemlum marshes).[35] Whatever the answer, it quickly became clear that the difficulty, duration and cost of the overland transport had been vastly underestimated. Indeed, while several weeks had been allocated for the transport, the final pieces of the ships would not arrive at the Euphrates until almost an entire year after being landed on the Syrian shore.

Many of these delays were political, and the official accounts of the overland transport descend into almost metronomic complaints about the lack of cooperation – and active and passive resistance – of both the Ottoman and the Egyptian authorities. Here Chesney was stuck between the limited authority of the Ottoman Sultan Mahmud II, and the significant sway of his increasingly independent and expansionist governor Mehmet Ali (Mohammed Ali Pasha) of Egypt. As Chesney explained: 'they had received orders to give us every aid; but as neither Government really desired the success of the Expedition, they took advantage of the neutral ground lying between their respective frontiers, and used it to disappoint our hopes as much as possible.'[36] In the case of Egypt, Chesney rued that while he had 'foreseen that the Pacha' would be averse to imperial intrusion 'by the opening of a highroad to India through his recently acquired territory' and expected 'in some measure, for *indirect* opposition' he 'had never supposed that he would venture to go so far as to oppose the British Government.'[37] In the event, Ali mainly intervened through his son Ibrahim Pasha, who had nominal authority in parts of Syria acquired following successful recent military

campaigns against the Turks in 1831-33. Here Ibrahim Pasha resisted the Expedition primarily via the tactic of withholding (or instructing local rulers to withhold) the provision of essential labour, both human and nonhuman.[38]

Meanwhile, on the Turkish front, resistance via proxies was also successfully mounted. The Ottomans paid close attention to the Expedition throughout, recognising its potentially acute significance for the region, and reported on its movements all the way up to the highest levels (where it factored amidst wider discussions of imperial reform, concern over Egyptian expansion into Syria, and with a keen eye on harnessing the potential of steam shipping for their own ends). [39] As one of the survey officers, James Estcourt (1802-1855) complained, 'the difficulties on the side of Ibrahim Pacha's territory are not of such consequence as these new difficulties on the part of the Sultan.'[40] A *firman* had been received from the Ottomans promising complete support (or so Chesney believed), but here too the imperial endeavour was for a time successfully resisted, with similar strategies of withdrawing labour and withholding essential supplies (including food and baggage animals). Chesney noted that on one occasion this escalated, and the magistrate of Birecik 'took the more decided step of searching our station for 2,000 muskets, which he alleged had been brought by us with some sinister design.'[41] Chesney admitted some existential fears for the Expedition at this point, and a concern 'that the seizure of our vessels was intended.'[42] Ultimately, moments like this are indicative of the Expedition's vulnerability and a reminder of its dependency; despite the firepower and *firmans* it carried, its progress and success always relied on local permissions and cooperation.

Speculation was ongoing that these obstacles and delays were ultimately the result of Russian interference. Estcourt detailed, for example, theories that 'some enemies of the enterprize have succeeded in poisoning the mind of the Sultan.'[43]

Chesney meanwhile suspected nefarious influences on Egypt: 'the opposition of the Pacha of Egypt was at the bottom of all these difficulties,' but 'no doubt the real explanation of all the hostility evinced … would be found in the opposition of Russia.'[44] This paranoia led to a number of bombastic rumours about Russian agents haunting the Expedition. As Chesney wrote to John Hobhouse at the Board of Control in February 1836: 'yesterday morning, a person came here on the plea of asking charity' and spent the day 'looking at everything about the vessels, in a way that gave rise to the belief that he is a Russian employé.'[45] Echoing other accounts from across the Indian 'sub-empire,' these reports speak of paranoia and suspicion, though often without any real conviction. They nevertheless fit a prevailing story that Russian agents must surely have been opposing the Expedition, not least because it served as a convenient excuse for more mundane failures of cross-cultural negotiation, and ongoing frustrations at being outmanoeuvred.

These various machinations and delays provide insight into not only the way that British imperial endeavours could be creatively and actively resisted, but also the quantity of labour required by make European expeditionary science move in this period. An image of the Expedition assembling on the Syrian coast gives a sense of the sheer scale of the operation required to transport the steamships (see Figure 2). This scale meant cross-cultural negotiations at multiple levels were essential, and failures here were a constant source of expeditionary breakdown (as well as having longer-term consequences in draining the Expedition's funds and the home authorities' faith in Chesney's leadership). These labour requirements were also amplified by topographical challenges, and one of junior officers, Edward Charlewood (1814-1894) noted that although they were following an established caravan route, this proved in many places unsuited to the unprecedented weight of the iron boilers.[46]

Figure 2 'The first caravan preparing to leave Amelia depot.'[47] In many ways a romanticised image, this nevertheless gives a sense of the sheer scale of the Expedition.

Indeed, the heavy boilers and the waggons that carried them proved near constant sources of hassle. One of the most challenging parts of the transport became known simply as the 'Hill of Difficulty.' Chesney explained that 'a zigzag path having been made' to the top of this, it was 'confidently expected that, with 40 pairs of oxen and 100 men to each sledge, the boilers might reach the crest of the hill one at a time.' However, this proved 'all but impracticable' and in the end 'the boiler was drawn by pulleys and drag-ropes inch by inch' (see Figure 3a and Figure 3b).[48] In such circumstances, complete failure of the waggons was common, 'which not only caused serious delay, but taxed the resources and ingenuity of the officers in charge to a painful extent.'[49] Throughout, Chesney and Charlewood thus take the ultimately triumphalist tone their audiences at home would expect, emphasising their own and the other European officers' ingenuity and determination in overcoming adversity (one assumes the backbreaking work of actually hauling the boilers might also have amounted to a 'painful extent,' but that is elided here). Indeed, Chesney rather disdainfully suggested

that ‘the people of the country were, naturally, quite unaccustomed to such serious labour, and this obliged us to employ at least three times the number that might have been necessary for similar exertions at home.’[50] In such scenarios, Chesney puts the agency on the Europeans officers when things went right, but blames the local workmen when things went wrong. Arab labourers thus frequently became scapegoats for slow progress, above and beyond the sustained political interference of the Ottoman and Egyptian authorities. These disparagements neatly reflect the ‘lazy native’ trope in imperial accounts in this period more widely, even as they also present sometimes transparent attempts to deflect blame and maintain supposed superiority in the face of dependence.

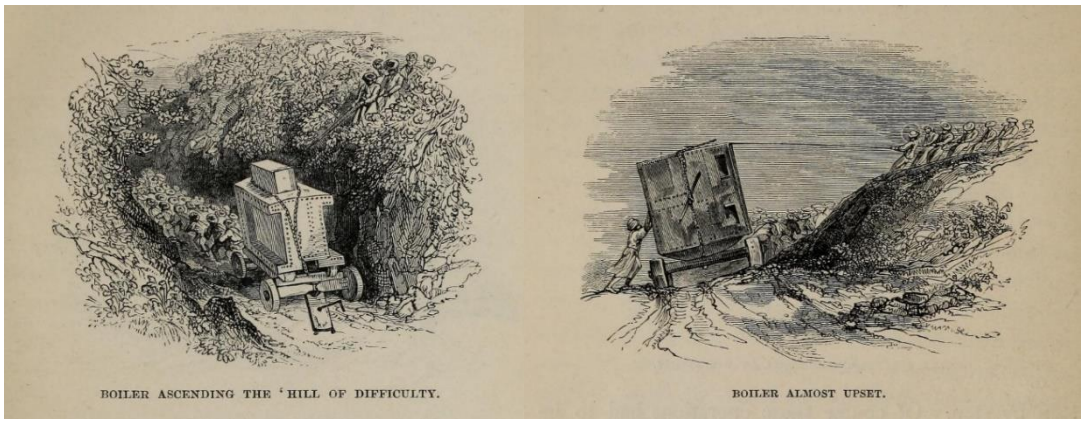

Figure 3a ‘Boiler Ascending the Hill of Difficulty’[51] and **Figure 3b** ‘Boiler almost upset.’[52] Both images show the large numbers of local labourers needed to guide the boiler waggons, and the dangerous nature of the work (later ‘a native youth was also killed on the road, the wheels of a waggon having gone over his head’).[53]

The frequent necessity of repairing broken-down waggons also led to one of the most absurd and casually violent incidents of Expedition. Midway through the transport, an axle in one of the large boiler waggons snapped in half. Edward Charlewood described the events surrounding the broken axle in his memoir, recalling that ‘there was a small shepherd’s house, or rather hovel’ nearby, at which a Syrian family were

sitting down to their breakfast. Charlewood accepted an invitation to join, and on finishing lay back 'trying to hit upon some plan for overcoming the difficulty' when he 'noticed that the roof of the hovel was supported from end to end by one large beam.'[54] As he continued:

> Excited as this discovery made me, I took care to proceed cautiously, quietly asking my host, in my broken Arabic, if he would sell his house. He laughed at me at first, but when I took him on one side and showed him a few gold gazi, his cupidity was excited. At last I made my bargain, stipulating that his whole family and their traps should be cleared out *instanter* … before the family were fairly cleared out, my men were on the roof … the poor Syrians evidently thought they were in the hands of a parcel of madmen.[55]

The result was that 'within less than an hour of the breakdown' the boiler waggon was repaired and back on the move.[56] Of course, we have only one side of the story here, which is played for amusement, juxtaposing stereotypes of Arab backwardness and greed against British ingenuity and resourcefulness. That we will never know what this family were actually thinking as their house was dismantled in the course of their breakfast, and requisitioned by the British empire to haul a steamship across the desert, is a particularly poignant example of the asymmetry of imperial expedition archives.

Eventually, the better part of year after it started (and having suffered additional complications as the rainy season turned the roads to mud), the last parts of both steamers finally reached the Euphrates River, where they were assembled at the flag-flutteringly named Port William (see Figure 4). Rather than concede that the overland trek had been a series of costly miscalculations – arising from a combination of political resistance, failures of cross-cultural negotiation, technological breakdowns and topographical underestimation – Chesney ultimately sought to cast these delays in terms of determination and zeal.[57] The account of William Francis Ainsworth (1807-1896), a

surgeon and the Expedition's attendant naturalist, was no less unabashedly self-congratulatory, describing the final arrival at the Euphrates as hailing the 'happy termination to a most difficult and trying undertaking, which stands to the present day without a parallel in the history of exploratory expeditions.'[58] As any story, this might have been told in a other ways; for example, as an account of imperial overconfidence and hubris, compounding failures, or successful (if often only temporary) resistance to imperial encroachment. Naturally, however, it was far from in Chesney's and Ainsworth's interest to do so.

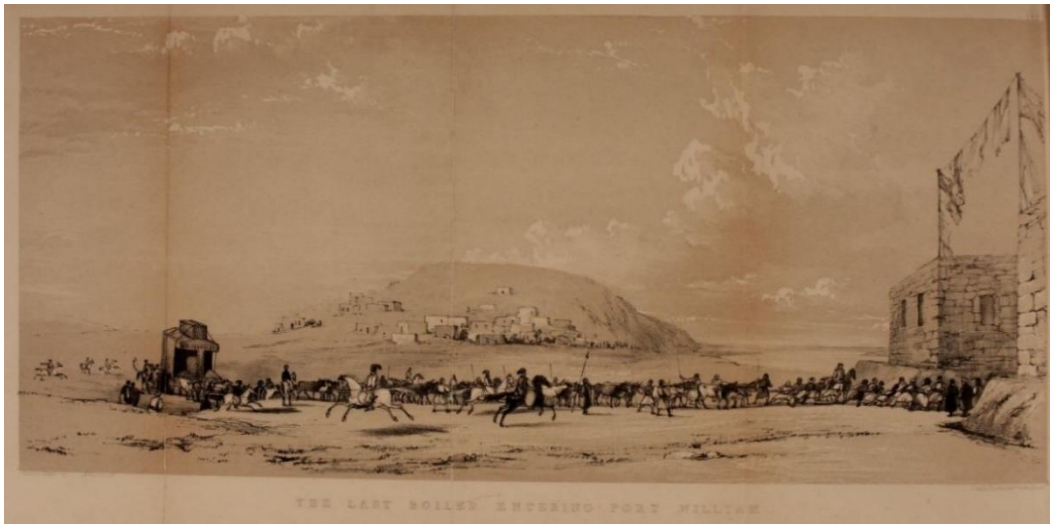

Figure 4 'The Last Boiler Entering Port William.'[59] This image is framed as a triumphant arrival, but belies the well-staged resistance and breakdowns that delayed the Expedition for nearly a year.

Technological Mastery, 'Moral Power' and Tropes of Superiority

In March 1836, Chesney was finally able to report to John Hobhouse that 'the navigation of the river Euphrates is actually commenced' and 'upon such a basis that the opening can scarcely be rendered abortive,' at least in any 'event short of a general war extending itself to Arabia, or such successful and diabolical intrigues, as might place us in a state of general hostility with the Arabs.'[60] The latter, although expressed

as unlikely, indicates a key vulnerability for the Expedition, and a more general concern about the long term viability of the Euphrates route; namely, that the ongoing support of not only the Ottoman and Egyptian authorities, but also the Arabs along the river was absolutely essential. Here Chesney and his backers saw the steamships as a sort of trump card, which would have an automatic effect in pacifying the Arabs once they realised that resistance was futile. For example, in describing how the newly assembled *Euphrates* was taken on a proving run upriver, past the town of Birecik, Chesney alleged that seeing the steamship 'stemming a rapid current, their astonishment knew no bounds; "ten Englishmen," they said, "could take their town,"' before they apparently attributed several miracles to the ship's supernatural power.[61] Indeed, accounts of the Euphrates Expedition are rife with references to the purported superstition of the Arabs to the apparently talismanic power of the British steamships. Assigning wonder, amazement and fear to 'credulous' and unscientific 'natives' in response to technological 'marvels' (especially telescopes, but also often steamships) were all already well-established tropes in exploration narratives in this period, and Chesney and his officers leaned on them heavily.[62]

In the case of the Euphrates Expedition, that the ships were made of iron was supposed to be a key source of this awe. Indeed, this was apparently a harbinger of doom, and as William Ainsworth went on to suggest, 'there was a tradition … which accompanied us the whole length of the river, that when iron should swim on the waters of the Frat, the fall of Muhammadanism would commence.'[63] This proverb was rehashed in various ways in the expedition accounts, and Chesney noted that 'the Arabs at Bagdad afterwards' provided one translation 'which runs thus: "when iron floats on the water, there is nought for the Arabs but dispersion or slaughter."'[64] These descriptions of the Arabs purported reactions thus lapse into a variety of Orientalist

stereotypes. When later arriving in Baghdad, Chesney recorded for example a 'doubt whether any Moslems had ever been so much moved in any other instance as when the Euphrates steamed up' and 'one grey bearded man was heard to exclaim … "has God only made one such creation?" But the general impression was a that a new prophet had been sent into the world.'[65] In the end, of course, these alleged responses inevitably tell us far more about how Chesney viewed the Arabs than how they viewed him.

However risible some of these attributions are, it is nevertheless apparent that the steamships were often the focal point of the Expedition's interactions with the Arabs who lived along the Mesopotamian rivers (see for example, Figure 5). Chesney and his officers actively tried to exploit this, which Chesney arguing that a 'single vessel could govern the whole line of the Tigris by means of the Moral power of this, to them supernatural machine,' which would ultimately allow the British to 'most likely pass for something more than human.'[66] On one occasion, Chesney hoped to instigate commercial relations by 'inviting the principal [Anaza] Sheikhs to visit us, and to take advantage of this intercourse to impress them by a display of our power' to which end 'we purposely postponed their visit to the vessels until the next day, in order to treat them, after dark, to a discharge of Congreve and Whale rockets.'[67] Chesney reported that 'this exhibition overcame our guests completely, and impressed them with a feeling of helpless inferiority.'[68] The next day, Chesney 'received them on board the quarterdeck where coffee was served, and spoke to them of peace and war in such a way as to make them eagerly desire the former' (here he relied especially on the assistance of Christian Anthony Rassam, the Expedition's Assyrian translator and broker).[69] After this martial display – and implied violence – Chesney presented the Sheikhs with a commercial and peace treaty (which was duly signed).

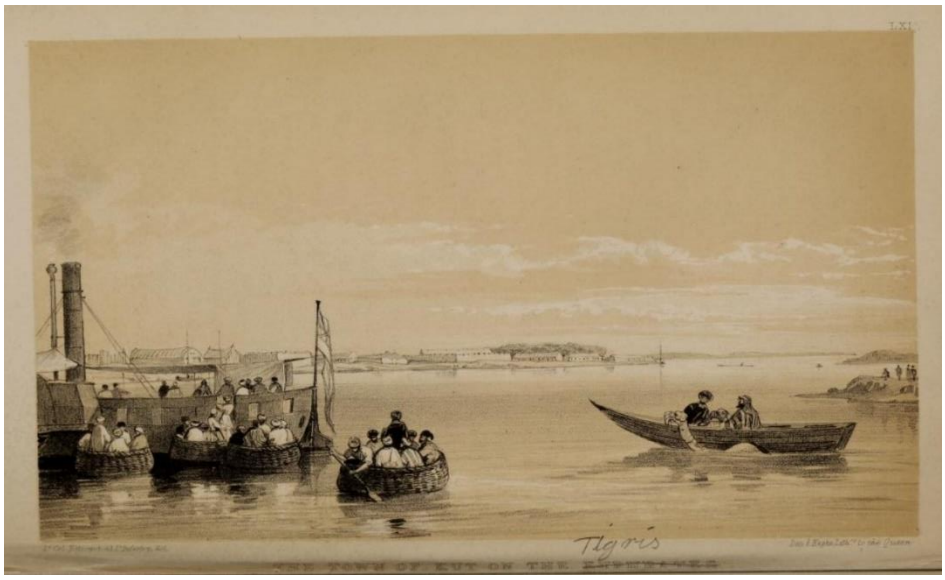

Figure 5 Arabs coming abord the *Euphrates* steamer in two different types of 'country' boats.[70] Throughout its travels, the Expedition tried to exploit the 'moral power' of the steamers in negotiating with the Arabs who lived along the rivers.

At the same time, this reliance on the steamships introduced a key point of vulnerability, and the semiotic and imperial symbolism invested in the steamships could bring significant risk, especially at moments when they broke down or failed. As Dane Kennedy argues, explorers 'saw themselves as agents of a technologically inspired modernity,' but this was fragile, much as the embryonic technology of the ships themselves.[71] Lawrence Dritsas demonstrates this in the specific case of steam exploration, writing in relation to David Livingstone's expedition on the Zambesi River (1858-64): 'as a group, the expedition rallied around cultural icons like steamships basing the success of their project partly upon their mastery of this technology' so 'when the ships failed to perform … it was a technical *and* psychological crisis.'[72] A letter from John Hobhouse to the EIC spells out just how dangerous such failures might be to imperial prestige, especially as 'the attention not only of the regular governments of Western Asia, but of the powerful tribes of the desert is now fixed upon the Euphrates' where 'they look upon the experiments as a test of the same superiority in

arts and arms which has reached from their Mahometan Brethren' elsewhere. He noted that 'they have been long accustomed to consider' British force 'irresistible' and thus any failures 'will necessarily diminish that respect and esteem which have hitherto contributed so much to establish and maintain your power.'[73]

Chesney also implied that the Expedition had to rely on the 'moral power' of technology because it was otherwise peculiarly vulnerable in not being able to exercise violence as freely as its officers might like. As he wrote, 'if we should gain such an unusual influence with the name of being irresistible, it must be preserved with the strictest care by avoiding most carefully all individual broils and collision with the natives.'[74] To this end Chesney went on to stipulate that: 'interpreters and natives must accompany every party going from the steamers either for objects of duty, science, or amusement' because 'a sword drawn or a gun fired in anger on such occasions might ruin all our hopes.'[75] Moreover, it was essential that 'the greatest possible forbearance be shown, for when Arab blood is once spilt the tribe rarely if ever forgives, and as … we are decidedly the stranger party of the two, we should not return their fire except in the last extremities of self defence.'[76] (Instead, it was better to pressure the Sheiks to dole out punishment where necessary, and avoid the 'burning of their village[s]' even when 'we might be fully justified.'[77]) These limitations are here turned into a rhetorical strategy to imply benevolence, and to reinforce tropes of supposedly superstitious and backward 'natives.' In the end, however, they inadvertently reveal the Expedition's dependence and vulnerability, even as they simultaneously serve to downplay the potential for and threat of violence that was essential to its functioning.

River Pilots, Brokers and Interpreters: Networks of Dependence

Whatever the sense of superiority and technological mastery imbued by the steamships and Congreve rockets, the British rhetoric was always slightly undercut by their reliance not only on the labour and cooperation of the Arabs, but also their expertise. This was especially so in the need for pilots who could guide them safely along the river, as well as in a wider dependence on brokers and interpreters. In recent years, a valuable body of scholarship has emerged around the essential roles of intermediaries in European imperial administration, science, and exploration.[78] Building on this, I here draw out some of the tensions between grandiloquent declarations of technological mastery and ongoing dependence on local expertise.

This dependence extended back to the expedition planning, and a reconnaissance survey of the Euphrates that Chesney made by raft in 1831. During this descent Chesney relied especially 'an Arab, named Getgood' who 'had been selected by the Sheikh, for his fidelity, as well as for his knowledge of the epic river, to accompany me.'[79] In addition to piloting Chesney's raft Mohammed 'Getgood' (whose name was anglicised with typical imperial disdain) also served other essential roles as a broker and informant. Indeed, Chesney noted in the map accompanying his 1833 report that he was unable to cover all of the ground, and part of the 'map therefore, is only intended to illustrate the relative positions … as given by Mahomed Getgood of Anna.'[80] Chesney explained that this 'intelligence was corroborated (after he left me) by some old Boatmen near Hilla; who had been accustomed in their younger days, to navigate from Bir to that place.'[81] Chesney also went on to defend this reliance on local knowledge, and attempted to bolster it by noting that 'Getgood, as it were, lived on the river since boyhood, and is thoroughly acquainted with every part of it above Anna' and 'he remained with me four months, during which period, I had ample opportunities of reverting to the answers he had previously given … finding that they always

corresponded.'[82] Again we see implicit acknowledgement of dependence, but this was also a rhetorical strategy by Chesney: an almost plaintive insistence of his own authority, necessary to convince the Government to fund the Expedition and place it under his charge in the first place.

In May 1836, 'Getgood' also joined up with the Euphrates Expedition proper, which Chesney noted 'was to me a great and very unexpected pleasure, since his death had been reported,' but instead 'we found him ready to renew his former services, and to help us in navigating with a steamer those waters which he had so zealously assisted me in surveying.'[83] Thus 'under his guidance [we] passed safely through the partially-broken waters which then concealed the Rocks of Karablah.'[84] Charlewood also described this reunion, suggesting that 'Getgood' was 'was quite delighted to see the Colonel again when we arrived at Anna.'[85] As so often in these cases, what little we can glean about the life and times of 'Getgood' is limited to snippets from the Expedition reports, refracted and caricatured through the European officers' notions of Arab loyalty or laziness, rapaciousness or indispensability. Moments like this are thus a reminder that narratives of vulnerability and 'failure' have often been used to humanise explorers like Chesney, but in these accounts we usually get no more than a whisper of the idiosyncrasies, hopes, and fears of the river pilots and guides they depended on.

Instead, the Expedition accounts are replete with references to the essential and quotidian functions that these pilots played, and a tacit acceptance of the reliance of the European 'technological marvels' on the Arabs' generational knowledge and lived experience of the Euphrates topography and character. Chesney nevertheless suggested that even this might be overwhelmed in the face of changing seasons or other errors, which in turn served to transfer some of the blame. As he wrote to Hobhouse in September 1836, 'we had one of the best pilots on the river, but although he has an

accurate general knowledge of its state, he was unable to indicate the course to be taken to pass the places where the water fails for a short distance' (as a result of seasonal fluctuations).[86] In these cases, Arabs were sent out 'wading or swimming until the best passage was ascertained, and if necessary, marked with stakes,' a successful strategy but a somewhat pyrrhic victory in that it further undermined the sense that the Euphrates was easily navigable.[87] Charlewood was nevertheless insistent that 'these native pilots answer remarkably well ... if it was not for them we should have been in several scrapes by this time' and claimed that 'Getgood is quite as good as any pilot navigating the Thames from Margate to the Pool.'[88]

While there was apparently a ready supply of local pilots willing to exploit the economic possibilities of the Expedition, William Ainsworth records that they sometimes ran the risk of being censured or punished for their involvement. For example, 'the Arabs of Hillah … had from the onset shown much jealousy at the arrival of a steamer among them' with 'their anger concentrating against the person of our pilot, without whose assistance they thought we never could have found our way to their town.'[89] Ainsworth went on to explain that 'the poor man was accordingly kept out of the way' but 'the revengeful Arabs had, however, watched their opportunity, and one of them rushed at him in the transit between the vessel and the castle, and cut him down with a blow of his war-hatchet.'[90] The pilot ultimately survived, but this is a reminder of the potential consequences for those aiding the British, and the active resistance to the Expedition from multiple quarters. It also undermines claims that the Expedition was overwhelmingly welcomed and implies – if one can read so far against the grain – a sense of not unjustified existential concern around what the steamships might herald.

The networks of pilots and knowledge brokers established and co-opted by the Expedition ultimately had important afterlives. This was similarly true for the

interpreters, and especially for Christian Rassam, who was later made British Vice-Consul of Mosul (Christian's brother Hormuzd meanwhile made major contributions to archaeology on behalf of the British Museum). Indeed, Assyrian Christians like Rassam subsequently became indispensable interlocutors for British interests and ambitions in the region.[91] Much as the maps and vast swathes of geological and hydrological knowledge, these networks of brokers, translators and guides would go on to shape imperial activities in Mesopotamia long after the Expedition 'failed,' and thus complicate any simplistic narratives of disaster and forgetting.

Vulnerability Unmasked: The Loss of the Tigris

If the steamships provided a sense of superiority and 'moral power,' they could also be a source of vulnerability and risk should they fail. And on the Euphrates Expedition, the worst did in fact occur. Indeed, the most dramatic incident of the Expedition, and the one which it is most remembered for (when it is remembered at all) was the fateful sinking of the *Tigris* steamer. On 21 May 1836, a storm suddenly rolled in over the desert, sweeping across the river as day turned to night, and the winds and sand howled (see Figure 6). When the storm cleared – only around twelve minutes later – the *Tigris* was gone, and it would later be confirmed that twenty of the thirty-four crew who had been onboard were dead ('fifteen valuable men, with five natives in addition').[92] Edward Charlewood records that the *Tigris* had vanished entirely, and 'it is most extraordinary that although we have been sounding … for two days we have not been able to discover where she is.'[93] The sunken ship was eventually located, upside down and resting on the bottom of the river. This was a failure in a general (perhaps even objective) sense, verging on 'heroic failure.' Moreover, it saw one of the Expedition's technological 'marvels' destroyed, a blow to the projected power and 'irresistibility' of

the steamships. For those following the Expedition from further afield, it also cannot have done much for wider perceptions around the safety and reliability of the Euphrates route to India.

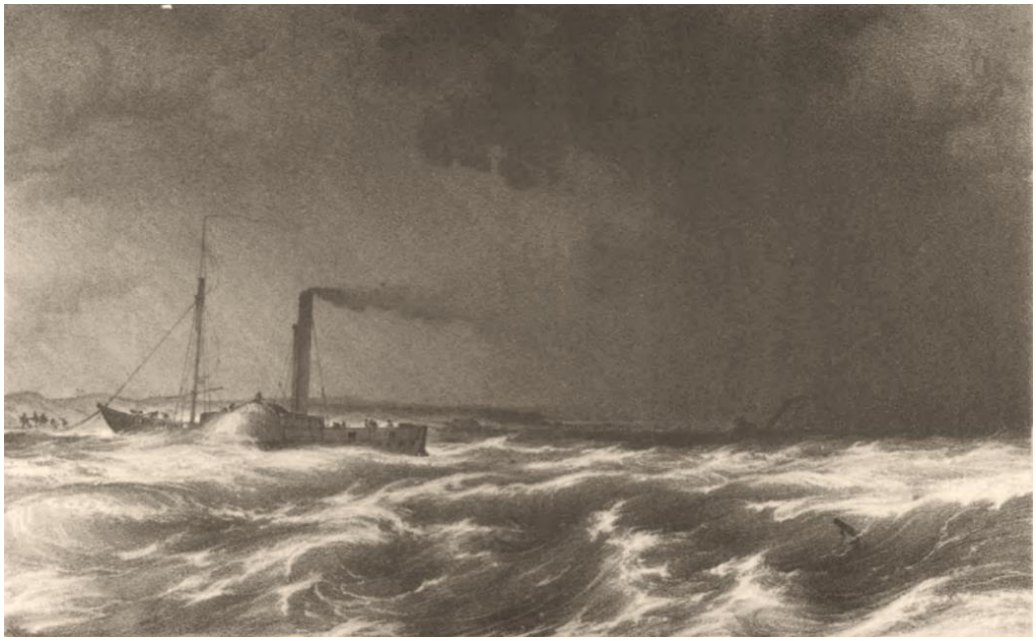

Figure 6 'The Tigris sinking during the Fatulah or Samm of the 21st May 1836.' Lithographed from a drawing by James Estcourt.[94]

Among the surviving European members of the Expedition, the sinking of the *Tigris* was mostly put down to a cruel accident, and ultimately the result of an extraordinary and unforeseeable weather event. Indeed, Ainsworth emphasised the shocking nature of the storm as 'the sky assumed an appearance such as we had never before witnessed, and which was awful and terrific in the extreme.'[95] Meanwhile, playing up the efforts of his officers, Chesney went on to conclude that 'under so extraordinary a trial no effort that skill could invent, or courage put into practice, was spared' but in the end 'she was overwhelmed, and sunk by a power as resistless as it was little to be expected.'[96] Chesney thus similarly casts the sinking as a disaster resulting from unforeseeable circumstances and sheer ill fortune – after all, to admit

otherwise would cast significant doubts about the viability of the Euphrates as a line of communication.

Chesney also relied on local oral tradition in his assessment that the storm was unprecedented, and went on to suggest that the hurricane had 'exceeded what has occurred in the memory of the oldest inhabitant' of the region.[97] Elsewhere, however, the naturalist Johann Helfer suggested the foreseeability of such events, writing that when he first saw the storm he 'had no idea that it was the simoom of the desert, which often buries whole caravans in sand.'[98] Ainsworth meanwhile referred to the Arabs' long experience in managing these storms (better it seemed than the Europeans with their vulnerable iron ship), as well as noting reports of hurricanes in antiquity. In particular, he referred to the Roman Emperor Julian's famous descent of the river and how at Anah 'there occurred "a terrible event; whirlwinds which blew down the houses and tents, overthrew the soldiers, and caused many boats to sink."'[99]

Beyond the immediate fallout, the loss of the *Tigris* was a considerable blow to the Expedition, and questions naturally arose about the viability of continuing altogether. Chesney explained these compounding issues, writing that 'one of our steamers, all our money, and a large portion of our party, had been lost.'[100] In light of significant over-expenditure and delays racked up during the overland transport, the Government had already been seriously considering pulling the plug before the disaster occurred ('instructions from home to terminate our labours at once' had in fact already reached Chesney but 'kept in abeyance,' and anyway soon rescinded).[101] While these negotiations were going on, the disaster meanwhile became lamented in the British press and in high places, with Chesney receiving via John Hobhouse the 'King's condolences on the melancholy event.'[102] Ironically, as the diplomat and erstwhile ambassador to the Ottomans Stratford Canning implied, rather than leading to the close

of the Expedition, the loss of the *Tigris* may actually have brought about sympathies that staved off its early termination: 'a calamity so purely accidental, attended with circumstances that place in strong relief the merit of the whole party, will surely serve to stimulate public attention, and consequently to strengthen the disposition of the Government to give your exertions a fair trial.'[103]

As well as the loss of lives and the *Tigris* itself, a considerable proportion of the Expedition's notes had gone down in the sunken ship, along with a series of draft maps, several scientific instruments, and a significant number of the natural history specimens.[104] While the *Euphrates* continued down the river, considerable effort was thus made to recover this material (and if possible salvage and refloat the *Tigris*). To this end, Chesney left the diving bell under the charge of one of the junior officers, Alexander Hector.[105] However, after several elaborate and labour intensive efforts to raise the *Tigris*, Hector concluded that 'she appears as fast as a rock.' Thus defeated, he tried to extract what he could: 'I afterwards cut a man hole in her starboard side, and found her more than half full of mud ... I tried to get the instruments, but did not succeed.'[106] The *Tigris* thus resisted all efforts, and ultimately remained upside down in the river, a slowly decaying testament to the fragility of the imperial technology.

Coal, Bitumen and Wood: Fuel and Other Technological Limitations

Let us now turn to the tension between superiority and dependence in another key context; namely, the inconvenient and never-ending need for the ships to be supplied with fuel. It had been hoped to run the *Euphrates* and *Tigris* steamers mostly on coal, and considerable effort was expended sourcing it and placing it along the river in suitable locations (or rather, contracting Arabs to do so). As with embryonic steam shipping in this period more generally, this proved a significant Achilles heel – not only

in terms of the logistics of maintaining coal depots, but also in the sometimes very considerable expense (something the traditional sailing vessels did not have to factor). In considering the long term prospects of the Euphrates route, the Expedition's geologist, Ainsworth, was thus conducting an anxious search for coal that might be mined locally, though he met with little success.[107]

One proposed solution to the constraints of coal was to turn instead to the petroleum products of the region, including bitumen and naphtha. These had been well known for millennia, and indeed the Expedition visited the 'celebrated' bitumen wells at Hit which appear 'to be still as inexhaustible as [they were] in the time of Herodotus.'[108] Ainsworth went on to explain that these products had long been used and the wells commercially exploited by the Arabs, including for sealing the local river boats the steamers sought to usurp (see Figure 7).[109] Chesney had considered this in the expedition planning, noting in 1833 that 'the fountains of bitumen seem to offer a still better, cheaper, and much more portable supply … than that of wood and charcoal; or, the resource of importing coals from England and India at a great expense.'[110] The use of bitumen as a fuel for steamships was nevertheless still an almost entirely unknown quantity. As Ainsworth explained, testing was required and 'not being found to answer by itself' bitumen 'was mixed with stones, earth, and dry dung, the ordinary fuel of the Arabs.'[111] However, these initial experiments were not a great success, and 'caused so much smoke to be given off ... as to choke the vents' and prevent combustion.'[112]

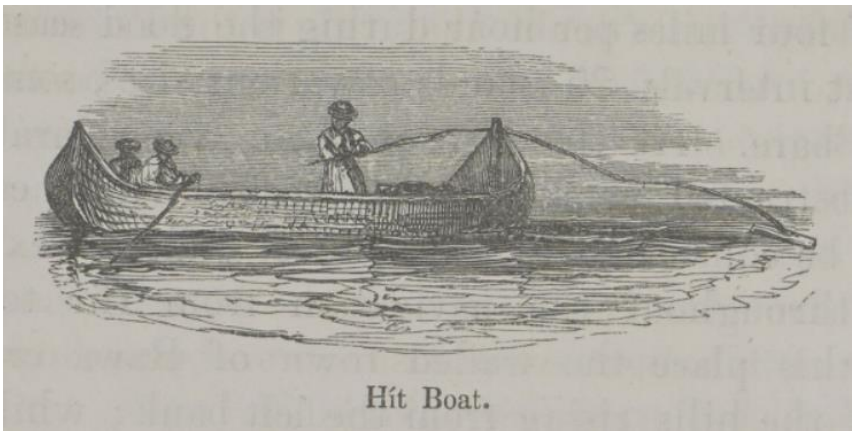

Figure 7 'Hít, still famous for boats coated with bitumen.'[113] The bitumen wells had long been used locally, including to waterproof the boats that had successfully plied the Euphrates for centuries before Chesney's unwieldy steamships arrived.

In the end, and despite the allure of the bitumen wells, the ships were ultimately powered for a large part of their journey by neither oil nor coal, but rather by old-fashioned wood. As Sujit Sivasundaram has argued in relation to steam in Burma, accounts like this ultimately complicate any straightforward story of an energy transformation under empire (both because petroleum products were often already well known and used locally, and because wood remained in many cases a preferred fuel).[114] As Chesney explained to Hobhouse, 'it will be unnecessary to go to the expense of bringing any more coals' because in the end wood could serve perfectly adequately and this 'alone will save about 4000£ during the next 12 months ... as well as an equal saving annually, should it' become 'a permanent line of communication.'[115] He continued to note that 'the cost of wood is chiefly the labor of cutting it' with 'merely a small sum being paid for permission to cut or make it into charcoal.'[116] However, as well as spelling out multiple layers of dependency, this proved somewhat more difficult in practice (as with many of Chesney's perennially optimistic predictions) and on one occasion they 'were disappointed in the hope' of finding prepared wood, and thus had 'to submit to the disadvantage of burning green wood which produced but ½ or at most

¾ Steam.'[117] On a later occasion, the Expedition also caused significant problems for itself by pillaging timber near Al-Khodar, which they afterwards discovered was believed 'one of the resting places of the prophet Elias.'[118] Chesney explained that a tense skirmish followed (in which the Expedition killed three Arabs with cannister shot), 'aroused by our having (in ignorance of their superstitions) cut down a part of the wood, which, owing to their Persian descent they regarded as sacred.'[119] Without overly dwelling on the symbolism of a British ship burning a scared grove to power its technological marvel across Mesopotamia, it seems fair to say that the outrageousness of this gesture was not lost on the Arabs.

Beyond the specific difficulties with fuel, there were also some fundamental issues with the ships' handling. These were particularly acute in the lower reaches of the river, and the treacherous Lemlum marshes, which were shallow and seasonally inconsistent (indeed this was so bad there was talk of building a canal for a short section, or even resurrecting an ancient canal across to the Tigris river to avoid it altogether).[120] Estcourt nevertheless insisted 'that with vessels suited to it, the river is capable of navigation without any alteration, blowing up of rocks, or removing of existing impediments,' though he went on to complain that the *Euphrates* 'does not answer this description' being too long and too sluggish.[121] Estcourt ultimately chose to conclude his assessment in an enthusiastic vein: 'let it be well understood, that we leave the river convinced thoroughly of its capabilities for navigation.'[122] As the next and final section explains, this was not a sentiment and a triumphalism shared by many.

The End of Expedition: Mixed Press and Qualified Acknowledgements

While attempting the mandated return ascent of the Euphrates River in late 1836, one of the air pumps on the *Euphrates* steamer cracked, a definitive breakdown seemingly

irreparable without assistance from home (see Figure 8).[123] Just as seriously, the appetite and goodwill of the authorities in Britain and India had been thoroughly exhausted. So too had the Expedition's finances, which had gone quite extravagantly over an already lavish original budget (in no small part because of the enormous delays during the overland transport). In the end, from all sources (including some of Chesney's own money) an estimated £43,000 had been expended, with relatively muted opportunities for claiming success.[124] Although the primary goal of both descending and ascending the Euphrates remained incomplete, there would thus be no more reprieves and in January 1837 the Expedition was officially disbanded.

Figure 8 'Here the engine of the Euphrates Steamer broke and was obliged to return 1836.'[125] These detailed maps of the river were later held up as the Expedition's main imperial contribution, and present a tension between the idea of it as a 'failed experiment' and the cartographic appropriation that it facilitated.

Acknowledgments arrived from various quarters, thanking Chesney for his efforts and his perseverance, if not necessarily his accomplishments. Not all were ambivalent, and for example Robert Grant, the Governor of Bombay, had earlier sent 'sincere congratulations that you have at length accomplished the great object of the

expedition,' a support that was largely maintained even once this pronouncement was proved somewhat premature.[126] Meanwhile, in a more mixed review, John Hobhouse at the Board of Control wrote to Grant that 'we do not at home look upon the Euphrates Expedition as a failure, far from it. But neither do we consider that it has been crowned with complete success,' with the unsolved issue of the Lemlum marshes flagged as a particularly significant caveat.[127] However, in a letter to Lord Auckland, the Governor-General of India, Hobhouse was more critical, remarking that 'the whole of his [Chesney's] proceedings have been marked by a want of prudence, to which, and which alone, I attribute the failure of half the objects of the expedition.'[128] Of course, this was perhaps face saving by blaming the execution and the 'man-on-the-spot,' rather than the plan that his Government had supported, and which Auckland's had declined to. Elsewhere, Lawrence Dritsas has explained how David Livingstone's later Zambesi Expedition came to similarly be seen as 'something of a failure.' However, 'this did not lead to ignominy for all involved' and 'instead they were able to use the Expedition as evidence of their abilities and expertise and move on,' a reminder that sometimes 'credibility was about practice and not results.'[129] In the case of the Euphrates Expedition, however, this may have been true for some of the officers, but it was not so for Chesney; indeed, it was his practices and mismanagement that ultimately came to be seen as central to the issues the Expedition had encountered.

The wider feeling was thus that the Expedition had failed (on its own terms no less) and moreover, that the viability of the Euphrates route to India did not look promising. Notices in the British press were not especially valorising, with the *Standard* erroneously reporting that 'Chesney himself has given up the hope of a communication with India by means of the Euphrates. The obstacles are judged to be insuperable' (in fact Chesney was preparing to go to Bombay to try to drum up further support there).[130]

Chesney was naturally put out by these criticisms, and 'what has been written and said by people in all quarters' and the various 'misinterpretations' which overtook the Expedition, in some cases long before its conclusion.[131] Indeed, what was particularly dispiriting, Chesney lamented, was 'the newspapers having pronounced, not that we were to fail but that we had already done so completely.'[132] Public relations might thus be seen as another sphere in which the Expedition 'failed,' with sympathy around the loss of the *Tigris* only going so far. In the end, whether any acceptable measure of 'success' could be devised perhaps did not anyway matter: the public *believed* that the Expedition had failed, and Chesney and his officers were never able to get ahead of or change this narrative.

Publicity around the Expedition also got Chesney into hot water when his officers had earlier misunderstood or ignored the Government's proscription against 'corresponding with public journalists.'[133] Failings in this department emerged as a key charge against Chesney by his growing ranks of critics. For example, Hobhouse wrote to Auckland how Chesney had been 'most reprehensible' in allowing 'his officers to correspond with journals, and abuse and calumniate the Home and Indian authorities.'[134] Here the Government was concerned about both regional and wider geopolitical fallout. Indeed, Hobhouse especially referred to remarks 'conveying censure on the authorities in Syria' which complicated attempts to launch a route 'through the heart of a country where such an arrangement can be made only on sufferance.'[135] Chesney attempted to defend himself, writing back that he had forbidden communications as instructed, but noted that 'when we were actually afloat I should have been glad to put the public right by an authorized statement,' especially given the rumours of failure already circulating.[136] Chesney also tried to blame these leaks on sabotage, stating that 'worst of all has been our Indian friends who, because they liked

the accommodation of carrying passengers to the Red Sea' have 'intimated that the reports on the river were got up by the officers contrary to what they thought privately to obtain promotion.'[137] He concluded 'all things considered the Euphrates Expedition has had a full share of enemies,' though he continued to hope that they would become supporters in time.[138]

Bad publicity, however, soon gave way to none, and interest in the Expedition faded as the attention of the public and the authorities turned to Suez.[139] This was exacerbated by the way that the protagonists' main Expedition narratives, including those by Chesney (1868), Pauline Helfer (1878) and Ainsworth (1888) were not published until many decades later (by which time the Red Sea route was anyway in its ascendency).[140] Expedition narratives played a crucial part in the public imagination of exploration in this period, and without them Chesney and his officers were not able to leverage public perception or sustain interest in their exploits (with perhaps the exception of another of the junior officers, James Fitzjames (1813-1848), who managed to join the classic canon of 'heroic failure' on his second attempt by disappearing on the infamous Franklin Expedition in 1848).[141] From other quarters, however, there was greater and more sustained interest. Chesney was awarded the Royal Geographical Society's seventh gold medal in 1838 (perhaps tellingly, this was as much for services to the physical and comparative geography of Syria and Mesopotamia as it was for the navigation of the Euphrates *per se*).[142] Indeed, several of those who acknowledged that the primary goal of the Euphrates Expedition had not been successful were nevertheless keen to emphasise its contributions to science and geography, and particularly the extensive and highly detailed maps (as seen for example in Figure 8).[143] These maps (alongside the networks of brokers and pilots) paved the way for further encroachment into Mesopotamia, an increasingly important sphere of imperial competition as the

nineteenth century progressed. Indeed, as Uğur Akbulut suggests, even if the Expedition did not meet its short term aims, it ultimately laid the groundwork for British interference in the following decades (and was understood as having done so by the Ottomans).[144] These legacies thus complicate ideas of the Expedition as a 'failed experiment,' and as indicative of the limits of imperial mastery. This it may have been, but for the Arabs who lived along the Euphrates and Tigris, it also had real and lasting consequences.

Conclusion

Although the Euphrates Expedition came to be widely considered a failure, questions about the place of Mesopotamia in the sub-imperial system and its potential for economic exploitation remained important. Indeed, Jonathan Parry notes that 'British preoccupation with the potential of steam on the Tigris and Euphrates lasted long after the expedition had failed.'[145] Here it was thought that the steamships and their 'moral power' would continue drawing the Arabs into Britain's arc – as both a means of outmanoeuvring France and Russia, and for expanding commerce – even as hopes for a major steam line to India largely disappeared.[146] Henry Blosse Lynch (1807-1873), who had been Chesney's second in command on the Euphrates Expedition, and naval surveyor James Felix Jones (1813/14-1878), were sent to continue surveys and experiments on the Mesopotamian rivers in the late 1830s and 1840s (with three new and improved steamships joining a repaired *Euphrates*).[147] Later still, Lynch was a founder of the Euphrates and Tigris Steam Navigation Company, which did carry passengers and trade between Basra and Baghdad (not very long afterwards in competition with Ottoman steamships) but as Camille Cole explains, these operations

were ‘beset by a combination of environmental, social, and political challenges’ and ultimately, ‘steamships were unable to conquer Iraq.’[148]

Interest in a route through Mesopotamia as a highway to India did however re-emerge in the 1850s, this time based on alternative to the steamships; namely, a railway. This was intended to link the Mediterranean to the Persian Gulf, and covered by a general concession from the Ottomans (here Chesney was again involved).[149] However, this had yet to come to anything when William Ainsworth revisited the idea in 1872, presenting arguments about ‘the great importance of the Euphrates Valley Railway to the commerce of this country and the security of our empire.’[150] Notably, in later railway prospectuses like Ainsworth’s, the emphasis is firmly on economic benefits to Britain, imperial ‘improvement’ of the region, and geopolitical security. Suggestions of this being a potential thoroughfare to India were muted. The Euphrates Valley Railway, much like the Euphrates steam line, thus became merely another route to India that never was.

These later and ongoing imperial endeavours are nevertheless a reminder that focusing on the ‘failure’ of an individual expedition like Chesney’s, especially one reliant on an embryonic technology, might be unfair or unhelpful (even if this sense of failure was shared by many of the contemporary actors). Indeed, classic histories of technology might prefer to analyse the Euphrates Expedition as part of a longer process of imperial expansion in which ‘success’ and ‘failure’ were part of a narrative of ‘progress,’ and it is certainly true that this was neither the beginning or the end of imperial attempts to control Mesopotamia.[151] This article has nevertheless been less interested in the role of ‘failure’ as part of a process of technological development, and rather more in why the way that we tell stories of vulnerability and ‘failure’ in histories of imperial exploration and science matter. In the context of acclimatization and disease

in India, Mark Harrison has suggested that 'vulnerability and superiority were two sides of the same imperial coin.'[152] I would argue that this also forms a central tension in how the history of exploration, science and technology is now being written in relation to imperial expeditions like that of the Euphrates. On the one hand, emphasising the limits of mastery downplays the violence of imperial exploration, but on the other, not acknowledging the limits of supposed superiority takes agency away from those who the Expedition depended on, and who might – even if only for a time – successfully and creatively resist the imperial endeavour.

Vulnerability, dependency and 'failure' all went hand-in-hand with imperial science, geography and exploration in the nineteenth century. The Euphrates Expedition was vulnerable on multiple fronts, whether through fragile technology, environmental obstacles, or an increasingly hostile press and public. Similarly, it was never not dependent on the ongoing political cooperation of the Egyptian and Ottoman authorities, the expertise and labour of Arab river pilots and workmen, and the cooperation local Sheiks. And yet, it was an imperial venture that sought to solidify imperial control over India, create a buffer against Russia and France, develop new networks of brokers and informants, and establish new spheres for economic exploitation. Whether in demolishing a Syrian family's home to repair a waggon, firing Congreve rocks as an inducement to sign a treaty, burning a sacred wood to power its boilers, or killing Arabs with canister shot, it was also an endeavour that always relied on violence, whether implied or at times actual. More broadly, it had significant consequences for those who lived along Mesopotamia's rivers, and which lasted long after the Expedition itself was forgotten. In particular, even if it had 'failed' to inaugurate a new highway to India, the Expedition produced extensive and detailed maps and scientific surveys, as well as networks of broker, interpreters and river pilots,

all of which would go on to mediate imperial misadventures in the region for decades to come. Indeed, British designs on Mesopotamia only grew over the course of the nineteenth century, expanding into the twentieth century and WWI, and continuing all the way down to the invasion of Iraq in 2003.[153] These legacies are a further reminder that, whether in the past or the present, the stories told about 'failure' and vulnerability in imperial exploration, surveying and science have never been neutral. Indeed, they might ultimately serve to reinforce as much as undercut the self-serving rhetoric of the imperialists themselves.

Notes

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[1] Parry, 'Steam Power,' 148; 155

[2] Parry, *Promised Lands*, 130.

[3] Cole, 'Precarious Empires,' 75.

[4] Schaffer, 'Easily Cracked.'

[5] Braun, 'Introduction'; Gooday, 'Re-writing'; Lipartito, 'Picturephone'. See also Marsden and Smith, *Engineering Empires*.

[6] Driver and Martins, 'Shipwreck and Salvage,' 541.

[7] Craciun, *Writing Arctic Disaster*

[8] Barczewski, *Heroic Failure*, 13.

[9] Kennedy, *The Last Blank Spaces*, 5.

[10] Ibid., 267-68.

[11] Chesney, 29 March 1835, British Library [hereafter BL], IOR/L/MAR/C/573, f277-8.

[12] Chesney to Hobhouse, 17 April 1836, BL, Mss Eur F213/4, f158.

[13] [Helfer] Nostiz, *Travels*. See also, Naumann, *Euphrat Queen.*

[14] Ellenborough to Chesney, 24 January 1835, BL, IOR/L/MAR/C/573, f158.

[15] Bayly, *Empire & Information.* See also Fisher, *Outskirts*.

[16] Guest, *The Euphrates Expedition*. Jonathan Parry's *Promised Lands* provides valuable context for British imperial politics around the Expedition, but only touches briefly on the

Expedition itself. For the botanical material collected, see Edmondson, 'The Flora and Fauna.' For Ottoman perspectives on the Expedition, see Akbulut, *Hindistan.* Looking further back, a 1960s dissertation deals with the Expedition in considerable detail: Khan, 'British Policy in Iraq.' Israeli diplomat Eliahu Elath similarly completed a dissertation, which was expanded and published (in Hebrew): Elath, *Britain's Routes to India*. Meanwhile, in the mid-twentieth century, Dorsey Jones presented the Expedition as a re-evaluation of a 'lost' imperial endeavour: Jones, 'Chesney Chose the Euphrates Route.'

[17] Goren, *Dead Sea Level*, 64.

[18] See Martin and Armston-Sheret, 'Off the Beaten Track?'

[19] *Report from the Select Committee*.

[20] Guest, *The Euphrates Expedition*, 7; Goren, *Dead Sea Level*, 43–44.

[21] 'Review - Steam Navigation to India,' 97.

[22] See Hoskins, *British Routes*; Ingram, *In Defence*.

[23] See for example Peacock, 'Memorandum Respecting the Euphrates Expedition,' 13 January 1836, IOR/L/MAR/C/574, f9-12. See also Parry, *Promised Lands*, 146-67.

[24] See Blyth, *The Empire of the Raj*; Onley, *The Arabian Frontier*; Darwin, *The Empire Project*.

[25] Clarke and Carnac to Hobhouse, 14 January 1836, BL, Mss Eur F213/4, f234.

[26] Ibid., f234-5. See also 'The Euphrates Expedition - Reprint of The Calcutta Courier,' 10.

[27] See for example, Adas, *Machines*.

[28] Headrick, *The Tools*, 17.

[29] Kubicek, 'Shallow-Draft Steamboats,' 86; 89. See also Dewey, *Steamboats*, 2; Sivasundaram, 'The Oils of Empire.'

[30] For the results of this, see *Report from the Select Committee*. See also Headrick, *The Tools*, 17–42.

[31] Chesney, *Narrative*, 144–45.

[32] *Report from the Select Committee*, 4.

[33] Ibid.

[34] Ibid., 70.

[35] Guest, *The Euphrates Expedition*, 35.

[36] Chesney, *Narrative*, 210. For more on Egyptian perspectives see Fahmy, *All the Pasha's Men*, 298–99.

[37] Chesney, *Narrative*, 173.

[38] Ibid, 172–73.

[39] For more on Ottoman perspectives, see Akbulut, *Hindistan.*

[40] Estcourt to Hobhouse, 16 December 1835, BL, Mss Eur F213/4, f123.

[41] Chesney, *Narrative*, 210.

[42] Ibid.

[43] Estcourt to Hobhouse, 16 December 1835, BL, Mss Eur F213/4, f121.

[44] Chesney, *Narrative*, 204–5.

[45] Chesney to Hobhouse, 27 February 1836, BL, Mss Eur F213/4, f130.

[46] Charlewood, Journal, Vol 1, BL, Mss Eur F711/1, f39.

[47] Chesney, *The Expedition*, Vol 1, frontispiece.

[48] Chesney, *Narrative*, 194–95.

[49] Ibid, 196.

[50] Ibid, 187.

[51] Ibid, 195.

[52] Ibid, 196.

[53] Ainsworth, *Personal Narrative*, Vol 1, 89.

[54] Charlewood, *Passages*, 30-31.

[55] Ibid.

[56] Chesney, *Narrative*, 197.

[57] Ibid, 177.

[58] Ainsworth, *Personal Narrative*, Vol 1, 95.

[59] Chesney, *Narrative*, 208.

[60] Chesney to Hobhouse, 18 March 1836, BL, Mss Eur F213/4, f142.

[61] Chesney, *Narrative*, 223.

[62] Kennedy, *The Last Blank Spaces*, 157.

[63] Ainsworth, *Personal Narrative*, Vol 1, 214.

[64] Chesney, *Narrative*, 203.

[65] Chesney to Grant, 16 October 1836, BL, IOR/F/4/1701/68745.

[66] Ibid. See also Chesney, 29 March 1835, BL, IOR/L/MAR/C/573, f294.

[67] Chesney, *Narrative*, 239.

[68] Ibid.

[69] Chesney to Hobhouse, 30 April 1836, BL, Mss Eur F213/4, f162. See also Charlewood, Journal, Vol 3, BL Mss Eur F711/3, f108-10.

[70] Chesney, *Narrative*, 306. The pencil correction is accurate, and this depicts a scene from the later ascent of the Tigris River, rather than the Euphrates.

[71] Kennedy, *The Last Blank Spaces*, 157.

[72] Dritsas, *Zambesi*, 108.

[73] Hobhouse to Clarke and Carnac, 19 February 1836, BL, IOR/L/MAR/C/573, f56-7.

[74] Chesney, 29 March 1835, BL, IOR/L/MAR/C/573, f292-4.

[75] Ibid., f295.

[76] Ibid., f292.

[77] Ibid., f293.

[78] See among others Schaffer et al., *The Brokered World*; Driver, 'Hidden Histories.'

[79] Chesney, *Narrative*, 69.

[80] Chesney, *Reports*, 57.

[81] Ibid.

[82] Ibid, 57–58.

[83] Chesney, *Narrative*, 261.

[84] Ibid.

[85] Charlewood, Journal, Vol 3, BL, Mss Eur F711/3, f157.

[86] Chesney to Hobhouse, 27 September 1836, BL, Mss Eur F213/5, f223.

[87] Ibid.

[88] Charlewood, Journal, Vol 3, BL, Mss Eur F711/3, f157.

[89] Ainsworth, *Personal Narrative*, Vol 2, 18-19.

[90] Ibid.

[91] See Fisher, *Outskirts*, 40-47.

[92] Chesney, *Narrative*, 262.

[93] See also Charlewood, Journal, Vol 3, BL, Mss Eur F711/3, f148.

[94] Richardson, *The Loss*, 24.

[95] Ainsworth, *Personal Narrative*, Vol 1, 390.

[96] Chesney and Ainsworth, 'A General Statement,' 427.

[97] Chesney to EIC, 27 September 1836, BL, Mss Eur F213/5, f372.

[98] [Helfer] Nostiz, *Travels*, Vol 1, 247.

[99] Ainsworth, *Personal Narrative*, Vol 1, 399-400.

[100] Chesney, *Narrative*, 259.

[101] Ibid, 260.

[102] For press coverage, see for example BL, IOR Neg 1876/2, f6. For the King's condolences, see Chesney, *Narrative*, 272.

[103] Canning to Chesney, 30 July 1836, reproduced in Chesney, *The Life*, 348.

[104] Chesney, *Narrative*, 347.

[105] Chesney to Hobhouse, 28 May 1836, BL, Mss Eur F213/4, f174

[106] Hector to Werry, 15 October 1836, BL, Mss Eur F213/5, f244.

[107] Chesney to Hobhouse, 27 February 1836, BL, Mss Eur F213/4, f128.

[108] Chesney, *Narrative*, 78.

[109] Ainsworth appendix in Chesney, *Narrative*, 497.

[110] Chesney, *Reports*, 46.

[111] Ainsworth, *Personal Narrative*, Vol 1, 335.

[112] Ibid., Vol 1, 336.

[113] Chesney, *The Expedition*, Vol 1, 54.

[114] Sivasundaram, 'The Oils of Empire', 379–80.

[115] Chesney to Hobhouse, 16 May 1836, BL, Mss Eur F213/4, f165.

[116] Chesney, *Reports*, 46.

[117] Chesney to Hobhouse, 27 September 1836, Mss Eur F213/5, f221.

[118] Ainsworth, *Personal Narrative*, Vol 2, 62-3.

[119] Chesney, *Narrative*, 290.

[120] See Ainsworth in Chesney, *The Expedition*, Vol 2, 697.

[121] Estcourt to Hobhouse, 29 October 1836, BL, Mss Eur F213/5, f240.

[122] Ibid., f240-1.

[123] Chesney to Hobhouse, 3 October 1836, BL, IOR/F/4/1701/68745.

[124] See Hoskins, *British Routes*, 176–78.

[125] Chesney, *The Expedition*, Map Vol, 9r.

[126] Secretary of Bombay to Chesney, 28 June 1836, BL, Mss Eur F213/5, f101.

[127] Hobhouse to Grant, 23 February 1837, BL, Mss Eur F213/5, f258.

[128] Hobhouse to Auckland, 26 January 1837, BL, Mss Eur F213/5, f176.

[129] Dritsas, *Zambesi*, 190.

[130] 'The Euphrates Expedition,' *The Standard*, 22 January 1837, BL IOR Neg 1876/2, f15.

[131] Chesney to Hobhouse, 5 May 1837, BL, Mss Eur F213/6, f83.

[132] Chesney to Grant, 1 September 1836, BL, Mss Eur F213/5, f255.

[133] Hobhouse to Chesney, 30 November 1836, BL, Mss Eur F213/5, f103-4.

[134] Hobhouse to Auckland, 26 January 1837, BL, Mss Eur F213/5, f176.

[135] Hobhouse to Chesney, 30 November 1836, BL, Mss Eur F213/5, f103. For the reports in question, see for example 'The Times,' 28 March 1836, BL, IOR/L/MAR/C/573, f661.

[136] Chesney to Hobhouse, 26 October 1836, BL, Mss Eur F213/5, f236.

[137] Chesney to Hobhouse, 5 May 1837, BL, Mss Eur F213/6, f83.

[138] Ibid.

[139] The sinking of the *Tigris* nevertheless continued to evoke romantic interest. See Richardson, *The Loss*.

[140] Chesney, *Narrative*; [Helfer] Nostiz, *Travels*; Ainsworth, *Personal Narrative*. Chesney did publish an account in 1850, which was intended to be four volumes, but only the first two on the historical geography of Mesopotamia (rather than the Expedition itself) were ever completed. See Chesney, *The Expedition*.

[141] Keighren et al., *Travels into Print*.

[142] 'Report from the Council,' iv–v.

[143] See Chesney, *The Expedition*, Map Vol.

[144] Akbulut, *Hindistan*.

[145] Parry, 'Steam Power', 148.

[146] Ibid, 156.

[147] See Cole, ‘Precarious Empires’; Crouzet, ‘Rivalités et utopies.’

[148] Cole, ‘Precarious Empires’, 76. See also Cole, ‘Controversial Investments.’

[149] Chesney, *Report*; Andrew, *Memoir*. See also Fisher, *Outskirts*, 35–41.

[150] William Ainsworth, *The Euphrates Valley*, 6.

[151] See Gooday, ‘Re-writing’; Lipartito, ‘Picturephone.’

[152] Mark Harrison, *Climates and Constitutions*, 224.

[153] See for example Satia, ‘Turning Space into Place’; Fisher, *Outskirts*.

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