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Arabians for guns: Wahhabi matchlocks, world trade, and the rise of the first Saudi state

Leor Halevi

Department of History, Vanderbilt University, Nashville, Tennessee, United States of America Email: leor.halevi@vanderbilt.edu

Abstract

Historical explanations of the rise and expansion of the first Saudi state have given Wahhabism pride of place. Principally, they have dwelt on religion and ideology, emphasising the role of the eighteenth-century theologian Muḥammad ibn ʿAbd al-Wahhāb and arguing that his charisma, puritanical zeal, exclusivist approach to monotheistic worship, or neo-orthodox reform programme inspired a series of consequential political and military actions, beginning with the foundation of a theocratic emirate in Dirʿiyya and culminating in the conquest of much of Arabia. However much Wahhabi doctrines might have motivated warfare and state expansion, this article contends that the rise of the Saudi state depended on the spread of a new weapon—the matchlock gun. It considers the significance of firearms in regional warfare and, after making the case that they were likely to have been imported, builds up the revisionist argument that Najd had significant connections to world trade.

Keywords: First Saudi state; eighteenth-century Najd; Wahhabism; guns; Arabian horses; world trade

Of the many stories that chroniclers have recounted about Muhammad ibn 'Abd al-Wahhāb, Najd's most famous theologian, none is more surprising, perhaps, than the story about his gunmaking vision and skills. Around 1817, a few months before the fall of the Emirate of Dir^ciyya, the anonymous author of an Arabic chronicle, Lam^c al-Shihāb (The Glow of the Shooting Star), tried to explain to his readers how under Saudi rule Najd became a gunpowder state. Muskets, he held, were made in Najd before the time of Ibn ^cAbd al-Wahhāb, who guided the theocracy from his migration in 1744 to his retirement in 1773. But the wood of their stocks was inferior and their propulsion system was defective. Then Ibn 'Abd al-Wahhāb exercised his mind to imagine the weapon of the future: a firearm (tafaq) equipped with a match cord (fatila). This cord, when smouldering and moved by a serpentine lever towards a tiny powder-filled pan, ignited the priming charge that set off the main charge. In English, the gun was named a 'matchlock' after its firing mechanism. Now, Ibn 'Abd al-Wahhāb 'taught the people how to manufacture it and explained to them its unique qualities, which made them want to use and bear it. Thereafter it spread through all the towns of Najd, so that today it is even imported to the Yemen and the far fringes of Juhayna country' along the Red Sea coast. Widely adopted even in the Hijāz, 'the Wahhabi matchlock' (as it might be called) became a key commodity in the trade between city-dwellers and the Bedouin. There were several

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reasons for its success in the author's view. It was a well-made, rapid to fire, quite reliable, far-ranging, lightweight, mid-sized firearm. And its cost was reasonable—just five, eight, or ten *aryul*.¹

Intense concentration on military activities, which included making gunpowder, had turned Najd into Arabia's greatest firepower. Other Arab societies on the peninsula—in the Hijāz, Tihāma, Yemen, Oman, and among the Banū Khālid tribe and the people of Qaṭar Qātaba—had adopted matchlocks, and some of them had worked out how to manufacture them. But this industry was 'greater' in Najd, for it is 'their business (*sha'n*) every day or every other day'. Whoever was not raiding or conquering, practised lighting the match and shooting outdoors, an activity that boys started at age 15. Furthermore, Saudi Najd also manufactured gunpowder (*barūd*)—'and it is the best gunpowder'. No longer was there a 'need to import it from another kingdom' such as Yemen or Oman, although that used to be the case before Ibn 'Abd al-Wahhāb taught his followers [about] the qualities and components of gunpowder—transmitting to them what he learned from 'the land of al-Rūm', as Ottoman Anatolia was called, and Safavid Persia.²

There are many reasons to be sceptical about these legends. The author was a non-Wahhabi observer from the Persian Gulf who wrote his account, it appears, for a British official. He would have us believe that Ibn ^cAbd al-Wahhāb was a great traveller who spent years wandering through western Asia and living in Baṣra, Baghdad, and Iṣfahān.³ During his travels abroad, in addition to studying Islamic theology and Aristotelian philosophy, he allegedly also learned the art of making gunpowder. Over and above his achievements as the founder of a new Islamic doctrine or movement, he supposedly also played a critical role in the Saudi emirate as both its chief treasurer and master gunsmith. The legends about his contributions to the local manufacture of guns and gunpowder may indeed be dismissed as incredible. Yet they raise a historical question that historians of the expansion of the first Saudi state have not really asked: What role did firearms play in this process? An absolutely critical role, I argue in this article.

Of course, historians have long thought about the reasons for the rise of a state in a region traditionally known for its ungovernable tribes and inhospitable deserts. The fact that a large state emerged there in the eighteenth century is, in and of itself, intriguing. But historical interest in this process goes far beyond the drive to solve an antiquarian puzzle or uncover the genealogical roots of the kingdom of Saudi Arabia. According to the traditional narratives, the emirate was established around 1744 by a pact between the chief of the settlement of Dir^ciyya, Muhammad ibn Sa^cūd, and Ibn 'Abd al-Wahhāb. They co-founded a theocracy in a desert of unbelief. The chief agreed to follow the theologian's principles and policies; the theologian promised to guide the state to success. Whether or not such a pact ever occurred, Ibn 'Abd al-Wahhāb ended up playing a critical governing and policymaking role in a foundational period of state expansion. His status as the founder of the movement or ideology that was named after him (pejoratively or conventionally) has further piqued historians' interest in this political process, with some theorising that 'Wahhabism' was the force behind the emirate's expansion. Perhaps it was, but this article suggests that we should not disregard the role that military technology and world trade played in the state-making process.

¹ Anon., *Kitāb lam^c al-shihāb fī sīrat Muhammad ibn 'Abd al-Wahhāb*, (ed.) Aḥmad Muṣṭafa Abū Ḥākima (Beirut, 1967), p. 181 (503–504). When referring to muskets, this book uses a common term in the Persian Gulf*—tafaq*—which derived either from the Persian *tofāk* or the Ottoman Turkish *tüfenk*. Najdi chroniclers generally referred to their muskets by a different word*—banādiq*—without mentioning wicks or matches.

² Ibid., p. 182 (505–507).

³ Michael Cook, 'The provenance of the Lam^c al-shihāb fī sīrat Muhammad ibn 'Abd al-Wahhāb', Journal of Turkish Studies (Türklük bilgisi araştırmaları) 10 (1986), pp. 79–86; Michael Cook, 'On the origins of Wahhābism', Journal of the Royal Asiatic Society, third series, 2.2 (1992), pp. 191–202, at 193–194.

Obstacles to state expansion and theories about the rise of the Wahhabi state

The obstacles to state formation and expansion were serious. Najd is a vast desert plateau punctuated by oases and crossed by long wadis, dry riverbeds that now and then flow with torrential rains. During the eighteenth century, as in earlier times, its scarce water resources could support only a sparse population. The largest settlements were oasis towns that housed several thousand inhabitants. As well as animal husbandry, the cultivation of date palms, wheat, barley, millet, alfalfa, the citron *tranj*, and a few other fruits and vegetables allowed these settlements to sustain themselves reasonably well in years when they were not plagued by locusts, droughts, or epidemic outbreaks of cholera or smallpox. But the flocks and the crops made every oasis town an attractive target for depredation and, in theory, subjugation. If these towns withstood attacks and remained independent, it was thanks to their formidable natural and artificial barriers: sand deserts, escarpments, and fortified walls. The absence of an agricultural hinterland made it virtually impossible for invaders to sustain prolonged sieges; and a lack of functional artillery made castles defensible.

When historians have pondered the rise of a state in this forbidding terrain, they have entertained and, due to a lack of documentary evidence, speculated about plausible causes. One possible driving force would be population growth. If such a development occurred, as Saudi historian Al-Juhany has argued, then the rise of one or several states organised for expansion would be a 'natural' outcome. According to Al-Juhany, such a process was underway before the Saudi emirate's foundation. It was manifest in the emergence of 'regional political powers' represented by several chiefdoms whose authority extended from a central town to peripheral settlements. These chiefdoms had systems for collecting taxes from farmers as well as the socio-political organisation needed to coordinate military activities.⁴

It is true that oasis chiefdoms existed in eighteenth-century Najd; their strength was apparent in their ability to resist, for decades in some cases, Saudi subjugation. Yet there are three problems with Al-Juhany's model. The first is a lack of evidence demonstrating widespread population growth; his textual sources indicate population movements, not a demographic explosion.⁵ The second is that developments that might in theory have promoted such a trend in the region—a long period of peace, lack of epidemic outbreaks, or plentiful rain year in and year out—did not occur. On the contrary, Al-Juhany found no shortage of 'disastrous events', which decimated Najdi towns, in pre-Saudi chronicles.⁶ During the great famine of 1085 AH (1674 CE), the death toll was high and the situation so dire that survivors migrated eastwards, leaving Najd emptier than before.⁷ And the third is that Najdi chiefdoms had difficulties mastering even neighbouring settlements. 'Unayza, for instance, consisted of four settlements, each with its own walls, and 'numerous clans'. This made it hard to achieve political unity even in the 'Unayza cluster itself. Such obstacles led Al-Juhany himself to concede that the

⁴ Uwaidah M. Al-Juhany, Najd Before the Salafi Reform Movement: Social, Political and Religious Conditions during the Three Centuries Preceding the Rise of the Saudi State (Reading, UK, 2002), pp. 99–100, 149–152, 158. Similarly, Madawi Al-Rasheed, A History of Saudi Arabia, 2nd edn (Cambridge, 2010), Chapter 1 describes oasis-based emirates as centralised political organisations that lacked the unspecified qualities of 'fully fledged states'.

⁵ Archaeology could indicate population growth better than textual studies, but Najd has hardly been excavated. For criticism of Al-Juhany's evidence base, see Michael Cook, 'The expansion of the first Saudi state: the case of Washm', in *The Islamic World from Classical to Modern Times: Essays in Honor of Bernard Lewis*, (eds) C. E. Bosworth et al. (Princeton, NJ, 1991), pp. 661–699, at 677–678.

⁶ Al-Juhany, *Najd*, pp. 61–62.

⁷ 'Tārīkh Ibn 'Īsā', in *Khizānat al-tawārīkh al-Najdiyya*, (ed.) 'Abdallāh ibn 'Abd al-Raḥmān Āl Bassām (np, 1999), Vol. ii, p. 49.

'fragmentary and tribal nature' of Najdi society, as well as the lack of 'any unifying ideology', worked against the establishment of a single state.⁸

Other possible causes would be economic growth or commercial developments. Michael Cook, the author of several ground-breaking articles on Wahhabism, considered these possibilities in a study of the 20-year conflict that culminated in the Saudi conquest of the nearby settlements of Washm. Realising that the rise of the first Saudi state coincided with Europe's commercial expansion, he wondered if European trade might have had a significant effect in Najd. It could, for instance, have provided the region with crucial state-building resources. Cook found this hypothesis interesting and submitted in its support the reflection that Najdi society was 'highly mercantile' and linked in at least a modest way to the Persian Gulf's trading networks. He doubted the validity of it, however, because Najd's remote farmers produced 'no cash-crop... for a European market' and because Saudi history and Wahhabi ideology did not seem especially designed 'to serve the needs of commerce'. Furthermore, he felt that the hypothesis could not be proven 'with the scanty materials at our disposal'.⁹ There will be reasons to reconsider and revisit this hypothesis at the end of this article, but it is now time to bring up the radical alternative that Cook himself put forth.

After acknowledging the evidentiary lacuna that limits our historical understanding, he concluded, with inimitable style, that we are 'perhaps on solider ground' if we regard the expansion of the Saudi state as 'an act of God'. What he meant by this is that Saudi warriors had only one apparent military advantage over their equally matched foes: a 'sub-lime obstinacy of faith' inspired by the charismatic religious leadership of Ibn 'Abd al-Wahhāb.¹⁰

This never-proven thesis of last resort partly rested on knowledge of the 'classic pattern of state formation in Arabian history', which involved—as Cook described it—the mobilisation of 'a tribal population' by a 'politically activist' Islamic doctrine.¹¹ For a broader perspective, it is useful to recall the types of political associations conceptualised by Max Weber. He contrasted archaic warrior societies that went on marauding raids and never worried, or so he assumed, about the legitimacy of their conduct, with modern states whose vast bureaucracies, legal institutions, standing armies, and police forces served effectively to lay claim to a monopoly on the legitimate use of violence within and, in the context of war, beyond a territorial boundary. In addition, he conceived of political communities that had the potential to evolve into states. These were fraternities inspired by charismatic chieftains, which could develop organisations to justify violent social action against internal or external opponents.¹² Early on in their campaigns, the band of brothers from Dir^ciyya who helped to establish the Saudi emirate resembled most, in Cook's analysis, such a fraternity.

Cook's thesis was designed for debate, and historians have debated it. Against it, Saudi historians Abdulaziz Fahad and Khalid al-Dakhil have maintained that Wahhabism was not so much a tribal religious movement as an anti-nomadic urban ideology that responded to a social revolution, the imagined disintegration of tribal bonds in settled communities. In Fahad's view, the pacification of the Bedouin by a coalition of cities allowed the Saudi realm to expand and achieve stability. The pace of expansion was slow because 'the Wahhabis had to rely on ideological subversion more than physical force' to persuade

⁸ Al-Juhany, *Najd*, pp. 122, 152.

⁹ Cook, 'Expansion', pp. 678–679.

¹⁰ Ibid., pp. 676, 679.

¹¹ Ibid., p. 661.

¹² Max Weber, *Economy and Society: An Outline of Interpretive Sociology*, (eds) Guenther Roth and Claus Wittich (Berkeley, 1978), Vol. ii, pp. 902–907.

the nomads to become loyal subjects.¹³ Similarly, al-Dakhil claimed that Wahhabism was fundamentally 'an ideology of state formation'. According to him, 'nation building in eighteenth-century Arabia' was Ibn 'Abd al-Wahhāb's fixed objective, which he expressed in religious terms simply because religion was the 'hegemonic' discourse there.¹⁴ In contrast, Michael Crawford remarked in his biography of Ibn 'Abd al-Wahhāb that the 'initial aim was not to establish a state in a conventional sense, let alone a nation. It was to institute a regime of godliness.' Collective governmental efforts to enforce a strict monotheistic doctrine ($tawh\bar{t}d$) and excommunicate infidels ($takf\bar{t}r$) in Dir'iyya and nearby towns somehow or other 'caused... the emergence of a new kind of state'.¹⁵

Revisionist Saudi accounts of the making of the Emirate of Dir'iyya are refreshing and, in a Saudi context, controversial due to their promotion of sociological and demotion of theological explanations.¹⁶ Yet it is worth expressing reservations. Besides despoiling nomadic pastoralists, Dir'iyya's warrior bands endlessly waged war against other towns—first within and later beyond Najd. Dir'iyya's chief theologian had the tools to justify these expeditions before and after the fact—by accusing nomads and townsmen of paganism, infidelity, or apostasy. Had all rulers of towns submitted first and Bedouin chiefs next, then one could argue fairly that a pan-urban coalition bent on the indoctrination of heterodox nomads eventually succeeded in forming a unified state. But such a neat sequence of political affiliation never happened. Actually, some Bedouin clans became Dir'iyya's subjects or associates and thus loyal Muslims in Wahhabi eyes earlier than did some settled communities.¹⁷ Plus, despite inevitable conflicts and the Wahhabi bias against Bedouin beliefs, oasis dwellers and nomads had social relations and were economically interdependent.¹⁸

The conventional emphasis on the role of Wahhabism in explanations for the rise of the Saudi state is striking. It is clear why. Insider histories were written by Wahhabi chroniclers who celebrated theological motivations in politics and war. The earliest accounts by European authors followed suit. A 1798 letter by an East India Company factor and consul, Harford Jones, explained why soldiers of 'the sect of Puritan Arabs' had to for-swear payment for military services: supposedly they believed, as an article of faith, that 'there can be no other motive for war than religion'. Jones knew that the army of 'near 50,000' enthusiasts who called themselves 'true Mussulmans' got their rightful share of booty, yet he averred that they were dogmatically opposed to payments for 'serving God'.¹⁹ Jean Raymond, a French artillery officer, might have dwelt on secular military

¹³ Abdulaziz H. Al-Fahad, 'The `Imama vs. the `Iqal: *Hadari*-Bedouin conflict and the formation of the Saudi state', in *Counter-Narratives: History, Contemporary Society, and Politics in Saudi Arabia and Yemen,* (eds) Madawi Al-Rasheed and Robert Vitalis (New York, 2004), Chapter 2, p. 43.

¹⁴ Khalid S. al-Dakhil, 'Wahhabism as an ideology of state formation', in *Religion and Politics in Saudi Arabia: Wahhabism and the State*, (eds) Mohammed Ayoob and Hasan Kosebalaban (Boulder, CO, 2009), Chapter 3, pp. 28, 34.

¹⁵ Michael Crawford, Ibn 'Abd al-Wahhab (London, 2014), p. 92.

¹⁶ Jörg Matthias Determann, *Historiography in Saudi Arabia: Globalization and the State in the Middle East* (London, 2014), pp. 209–214.

¹⁷ In both Najd and the Ḥijāz, Bedouin groups joined Saudi campaigns before enemy towns. In Central Arabia, one of the Subai^c clans became a Saudi ally in the early 1760s. In the western campaigns, the Saudi alliance with the Buqum tribe under Ghāliya of Turaba's leadership was critical to Saudi successes in the region.

¹⁸ Peter C. Valenti, 'State-Building in Central Arabia: Empires and Regional Actors at the Crossroads of al-Qasim', (unpublished PhD dissertation, New York University, 2015), pp. 1–2.

¹⁹ Harford Jones, 'The Whahaubees', enclosure to his letter to Jacob Bosanquet, chairman of the East India Company, 1 December 1798, in *The Expansion of Wahhabi Power in Arabia, 1798-1932: British Documentary Records, 1798-1848,* (ed.) A. L. P. Burdett (Cambridge, 2013), Vol. i, p. 134, article no. 10. The enclosure's date is unclear. Jones sent the letter in which it was included from Baghdad in 1798; earlier, he had served as the Company's factor and resident in Basra.

factors in his explanation of the triumph of the 'Wahabys', who always carried pikes and rifles. But he derived the success of the 'new nation' from the theorem that they made war 'by principle of religion'. *Le Wahabisme* had hardened them, making their rivals tremble and succumb.²⁰ Other European authors extended this interpretive framework by casually describing the emirate's government and army as 'Wahhabi' even though many of their functions or activities had no apparent connection to Ibn 'Abd al-Wahhāb and his doctrines. Furthermore, they emphasised acts such as the destruction of ancestral tombs and magical trees, the investiture of missionary judges in conquered towns, and the commanding of daily prayers and forbidding of tobacco pipes by patrols 'armed with sticks'.²¹ Certainly, the Emirate of Dir^ciyya was committed to a programme of revival and reform associated with Ibn 'Abd al-Wahhāb; and it used Islam and Islamic law for legitimation. Nevertheless, it is fair to wonder if Wahhabism was the primary mover of territorial expansion. It is not as if Ibn 'Abd al-Wahhāb blew a trumpet and the walls of Riyadh came tumbling down. And we have no idea what the warriors of Dir^ciyya and their early allies actually believed and what moved them to fight.

Surely, any attribution of ideological unity to the makers and subjects of the first Saudi state should be resisted. Maybe the Swiss traveller Johann Ludwig Burckhardt got it just right when he recorded the apocryphal aphorism of the Saudi emir that 'no Arabs had ever been staunch Wahabys until they had suffered two or three times' from plundering.²² Submission to the emirate did not mean that the state acquired broad 'moral authority' to the extent that subjects universally came to see its preservation and expansion loyally as 'the highest social good'.²³ For reluctant adherents, it just meant a recognition that the cost of continued defiance was high and that there were benefits to joining the cause for a while. When they had to decide whether to collaborate with the state's demands, individuals as well as communities had to calculate the material consequences of refusing and complying. A great cynic, Burckhardt explained what would happen to war-weary camel and horse owners summoned to battle: 'If a man abscond, the chief takes away his mare, or camel, or some sheep, as a fine. Saoud was very severe in the exaction of these fines.' He also observed that, despite the fact that the duty to pay tribute was 'a principal tenet of the Wahaby faith', fierce, powerful Bedouin 'nations' who had sworn lovalty to the Islamic state refused 'perfect subjection'.²⁴ Given their divisiveness and militancy, Wahhabi doctrines must never have been a source of ideological unity.

In my view, three things that have nothing to do with religion or ideology go a long way towards explaining the rise of a conquering state in eighteenth-century Najd: muskets, horses, and camels. Muskets were Arabia's critical new weapons, which warriors from the peninsula's interior used to carry out raids on a larger scale than ever before, intimidating and vanquishing foes. Horses were Najd's most prized commodity overseas and their sale gave Najdi traders the cash to buy thousands of foreign firearms. And camels served to traffic weapons across the desert and transport infantrymen, now armed with matchlocks, to the battlefield. Of course, to use these weapons and mounts effectively for state expansion, political organisation and military tactics were essential. But in a simplified form my basic argument is that a new military technology, the matchlock musket, was essential to the expansion of the first Saudi state.

²⁰ Jean Raymond, Mémoire sur l'origine des Wahabys, sur la naissance de leur puissance et sur l'influence dont ils jouissent comme nation, with a preface by Édouard Driault (Cairo, 1925), pp. 7–10.

²¹ John Lewis Burckhardt, Notes on the Bedouins & Wahábys, Collected During His Travels in the East, (ed.) William Ouseley (London, 1831), Vol. ii, pp. 147–148.

²² Ibid., Vol. ii, p. 168.

²³ Compare to Joseph R. Strayer, *On the Medieval Origins of the Modern State*, with forewords by Charles Tilly and William Jordan (Princeton, NJ, 2005), p. 9.

²⁴ Burckhardt, Notes, Vol. ii, pp. 163-164, and Vol. i, pp. 104, 106.

It is a little surprising that historians before me have not hypothesised this. Since this state engaged in warfare from its rise to its fall and performed relatively few functions in society, one could persuasively argue that 'war made the state, and the state made war'.²⁵ In a European context, historians have long considered the political consequences of new military technologies. While reflecting on the decline of feudalism and the rise of centralised burgher-supported monarchies, Friedrich Engels observed: 'The introduction of firearms transformed not only warfare, but also political conditions of domination and subjugation.²⁶ Defenders of the 'military revolution' thesis would agree. They have proposed that the introduction of portable firearms led to a series of changes-new tactics and drills, innovative warships, the building of artillery fortresses, the establishment and growth of standing armies, and higher and higher war costs-that forced governments to raise revenues and expand bureaucracies. Ultimately, in their view, this process culminated in the emergence of 'early modern states' and 'the rise of the West'.²⁷ This thesis has been intensely debated for decades. Critics have challenged a complex causal model that purports to explain European supremacy and indulges in Eurocentric modernism when it construes 'modern' states in implicit and explicit juxtapositions with 'medieval' states in Europe and the rest of the world.²⁸ Nevertheless, what matters for our purposes is the linkage between the introduction of firearms and the expansion of military and bureaucratic structures.

The theocratic shaykhdom that eventually emerged may seem in almost every respect dissimilar to any European construct of 'the modern state'.²⁹ It was not, for one, a state in the sense of impersonal rule over a fixed territory.³⁰ Instead, it seemed to have the aura of personal rule over a territory whose boundaries were constantly shifting. The emirs who ruled it in hereditary succession visibly led troops to battle and pilgrims to Mecca; they personally heard grievances and appeals for justice. They had supreme authority over conquered lands but dispensed with a key symbol of sovereignty: 'The Wahabys have no particular coin.'³¹ To Europeans who were familiar with large standing armies, bloated

³⁰ For a conventional definition of 'the state', see Strayer, Medieval Origins, pp. 5-6.

²⁵ Charles Tilly, 'Reflections on the history of European-state making', in *The Formation of National States in Western Europe*, (ed.) Charles Tilly (Princeton, NJ, 1975), Chapter 1, p. 42. Tilly argued that the building of 'an effective military machine' mattered more than cultural homogeneity for the emergence of European nation-states. His famous aphorism is quoted here out of context and without the intent to imply particular similarities between European and Arabian state-making processes.

²⁶ Friedrich Engels, Herrn Eugen Dühring's Umwälzung der Wissenschaft, 2nd edn (Zürich, 1886), p. 159.

²⁷ Clifford J. Rogers (ed.), *The Military Revolution Debate: Readings on the Transformation of Early Modern Europe* (Boulder, 1995); Geoffrey Parker, *The Military Revolution: Military Innovation and the Rise of the West, 1500–1800* (Cambridge, 2016).

²⁸ William R. Thompson and Karen Rasler, 'War, the military revolution(s) controversy, and army expansion', *Comparative Political Studies* 32.1 (1999), pp. 3–31; J. C. Sharman, 'Myths of military revolution: European expansion and Eurocentrism', *European Journal of International Relations* 24.3 (2018), pp. 491–513.

²⁹ For three significant critiques of uses of this construct, see Philip Abrams, 'Notes on the difficulty of studying the state (1977)', *Journal of Historical Sociology* 1.1 (1988), pp. 58–89; Timothy Mitchell, 'The limits of the state: beyond statist approaches and their critics', *The American Political Science Review* 85.1 (1991), pp. 77–96; Quentin Skinner, 'A genealogy of the modern state', *Proceedings of the British Academy* 162 (2009), pp. 325–370.

³¹ Burckhardt, *Notes*, Vol. i, p. 304. Arabic and European sources refer to a very wide range of coins in different contexts. Jean-Baptiste Rousseau mentions that all foreign coins circulated among the Wahhabis, but reveals that they had their own copper coin: it displayed two interlaced hooks (*crochets*) and was worth just six-fortieths of a Turkish piastre. (Perhaps the hooks were meant to symbolise crossed sabres or curved daggers.) Spanish explorer Domènec Badia i Leblich (^cAlī Bey) discovered that Wahhabi pilgrims had no cash for donations expected in Mecca. They fulfilled the obligation by handing out 20 or 30 grains of a coarse powder (presumably gunpowder), lead fragments (presumably bullets), or coffee. In contrast, *Lam^c al-Shihāb* maintained that Najd's long-distance merchants mainly carried cash (*al-darāhim al-naqdiyya*) on trips abroad. Wahhabi chronicles often record tributary payments and sometimes refer to unfamiliar coins. Ibn Bishr, for instance, specified a punitive payment in

bureaucracies, and heavy police departments, the functioning of 'Wahaby government' with the barest minimum of personnel was astonishing. According to Burckhardt, the Saudi 'aristocracy' relied on a few sheikhs to enforce the law in their districts and 'recruit troops for the Wahaby army', appointed its own salaried *kadhys* everywhere, despatched tax collectors to all corners of the realm, and hired an elite guard of just 300 fully armoured cavalrymen.³² That was nearly the whole of its staff *after* state expansion. It had neither a standing army (a system of requisition sufficed) nor a conventional police force. Despite its minimalism, it managed to extract revenue from resentful Bedouin who had been 'formerly free from taxes of any kind'. It mounted ambitious military expeditions with irregular soldiers who were expected—unless they were poor—to equip themselves and buy their own provisions. And it succeeded in securing 'the country against robbers' without needing to build prisons for 'lower class' criminals.³³ It accomplished much of this through a system of heavy fines and punitive expropriations that depended on its claim to legitimate violence and on its capacity to apply force, including firearms and foot-fetters, to subdue rebels and shackle criminals.³⁴

Given the limited size of the Saudi army and bureaucracy from a European (as opposed to a Bedouin or Najdi) vantage point, it is better to turn for comparison to other parts of the world, where guns played a critical role in territorial expansion or state formation by indigenous peoples. Thus, in North America in the middle of the seventeenth century, the Iroquois Confederacy made use of an abundance of Dutch flintlock muskets, shot, and gunpowder to expand its beaver-hunting grounds and acquire Algonquin and Huron captives. Their firepower advantage did not lead to the formation of a sovereign state. However, it was an essential factor behind their success at expanding the territory controlled by their political system.³⁵ Something similar happened, albeit on a very small scale, in Pacific Ocean archipelagos in the early nineteenth century. Chiefs on the islands of Bau and Tahuata expanded their spheres of power in Fiji and the Southern Marquesas, respectively, by controlling the regional supply of guns and extending hierarchical confederations.³⁶

African history offers the most striking and relevant examples. In the semi-arid region around Lake Chad, 'Turkish musketeers', household slaves trained in the art of musketry, and God were key to the expansion of the Empire of Bornu.³⁷ Like the Saudi state since the time of Ibn ^cAbd al-Wahhāb, this was an Islamic state that used, as well as a cavalry of

³² Burckhardt, Notes, Vol. ii, pp. 131–133, 171.

¹¹⁸¹ AH of five horses and 300 aḥmar, red coins. M. R*** [Jean-Baptiste Rousseau], Mémoire sur les trois plus fameuses sectes du musulmanisme, les Wahabis, les Nosaïris et les Ismaélis (Paris, 1818), p. 8; Ali Bey El Abbassi [Domènec Badia i Leblich], Voyages en Afrique et en Asie: Les années 1803, 1804, 1805, 1806 et 1807 (Paris, 1814), Vol. ii, p. 323; Lam^c al-Shihāb, p. 183 (511–512); 'Uthmān ibn 'Abdallāh ibn Bishr, 'Unwān al-majd fī tārīkh Najd, 4th edn, (ed.) 'Abd al-Raḥmān ibn 'Abd al-Laṭīf ibn 'Abdallāh Āl al-Shaykh (Riyadh, 1982), Vol. i, p. 103. For additional specifications about the currencies that circulated in the Hijāz, Najd, and al-Aḥsā⁷, also consult, with due caution, Muhammad S. M. El-Shaafy, 'The First Sa'udi State in Arabia (with Special Reference to Its Administrative, Military and Economic Features) in the Light of Unpublished Materials from Arabic and European Sources' (unpublished PhD dissertation, University of Leeds, 1967), pp. 191, 199 and 206.

³³ *Ibid.*, pp. 136, 146, 154, 164–165. Burckhardt mentions that poor warriors were given camels and weapons by either rich patrons or the state's treasury, the *Beit el Mál.*

³⁴ In sum, submission to 'Wahaby' government brought to an end a 'disorderly state of law'. See Burckhardt, *Notes*, Vol. ii, pp. 132–136, 158, 163–165. For a more extensive but still sketchy treatment of the bureaucratic apparatus, see El-Shaafy, 'First Sa'udi State', pp. 73–112.

³⁵ David J. Silverman, *Thundersticks: Firearms and the Violent Transformation of Native America* (Cambridge, MA, 2016), pp. 35–39.

³⁶ Nicholas Thomas, *Entangled Objects: Exchange, Material Culture and Colonialism in the Pacific* (Cambridge, 1991), pp. 114–115.

³⁷ Ahmed ibn Fartua [Furțū], *A History of the First Twelve Years of the Reign of Mai Idris, Alooma of Bornu* (1571-1583), (trans.) H. R. Palmer (Lagos, 1926), pp. 11, 12.

camels and horses, religious ideology to justify attacking fellow Muslims from the Sultanate of Kano as if they were pagans. Guns were not the only weapons; nevertheless, they were one significant factor.³⁸ The Central African coast offers another good example. There, around the Gulf of Guinea, the import of guns favoured the development of the kingdom of Dahomey. This militarised state, whose fortunes depended on the transatlantic slave trade, established centralised political controls over the regional arms trade and effectively organised a standing army's use of guns and gunpowder. By these mechanisms, it made a transition in the early eighteenth century from raiding to conquering and ruling a much larger territory.³⁹

Anthropologists and historians have rightly warned against exaggerating the role that European firearms played in the making of indigenous confederacies, chiefdoms, and kingdoms. Muskets' military and political utility depended on a number of factors. They worked best in mid-range combat but were less effective than clubs and knives in face-to-face fights and not necessarily more accurate than bows and arrows for long-distance shooting.⁴⁰ Their efficacy also depended on the climate and the environment: windy and rainy weather rendered matchlocks ineffective; humidity caused rust. In West Africa, guns facilitated political centralisation processes in coastal forests, but not as much in tropical grasslands. Access to European suppliers was one reason for this difference, since dominion over ports meant control of the seaborne trade and thus the ability to restrict the traffic of imported guns and gunpowder into inland savannahs.⁴¹ The political system that existed before the introduction of guns also influenced the outcome. European guns did not create indigenous political systems *ex nihilo*. They operated initially within pre-existing hierarchical structures. Indigenous agency was crucial to their appropriation.⁴²

That said, muskets were of course terrifying, deadly, and advantageous in many situations, and their adoption lubricated political centralisation and territorial expansion processes in state as well as non-state systems.⁴³ Unlike darts and daggers, they were not weapons that any individual or blacksmith could readily make with available resources at a low cost. Ruling authorities in regions that did not develop a gun-making industry could claim a monopoly on importation or exercise special prerogatives. Even if they failed to assume exclusive control of what Jack Goody labelled 'the means of destruction', they still had more resources than others in society to acquire guns and ammunition, store *matériel* in magazines, and strategically distribute weapons to mercenaries or a loyal infantry. In West Africa, this advantage meant greater success at plundering and slaving expeditions, which fuelled state expansion and the growth of firepower—in a feedback loop. This is precisely how coastal slave-trading states, with their gun-equipped infantries, grew at the expense of the cavalry states of the interior.⁴⁴

³⁸ Jack Goody, *Technology, Tradition and the State in Africa* (Cambridge, 1971), pp. 70–71; Humphrey J. Fisher and Virginia Rowland, 'Firearms in the Central Sudan', *The Journal of African History* 12.2 (1971), pp. 215–239, at pp. 215 and 217.

³⁹ Robin Law, 'Warfare on the West African Slave Coast, 1650–1850', in *War in the Tribal Zone: Expanding States* and *Indigenous Warfare*, (eds) R. Brian Ferguson and Neil L. Whitehead (Sante Fe, 1992), Chapter 5.

⁴⁰ Joan B. Townsend, 'Firearms against native arms: a study in comparative efficiencies with an Alaskan example', *Arctic Anthropology* 20.2 (1983), pp. 1–33; Fisher and Rowland, 'Firearms', p. 230.

⁴¹ Goody, Technology, p. 55.

⁴² Thomas, Entangled Objects, pp. 114-115.

⁴³ For arguments against 'a school of thought which downgrades the importance of firearms in sub-Saharan Africa', see H. A. Gemery and J. S. Hogendorn, 'Technological change, slavery, and the slave trade', in *Technology and European Overseas Enterprise: Diffusion, Adaptation and Adoption,* (ed.) Michael Adas (Hampshire, 1996), Chapter 8, pp. 161–165. Also see R. Brian Ferguson and Neil L. Whitehead, 'The violent edge of empire', in *War in the Tribal Zone,* (eds) Ferguson and Whitehead, Chapter 1, pp. 20, 26.

⁴⁴ Goody, Technology, Chapter 3; Robin Law, The Horse in West African History: The Role of the Horse in the Societies of Pre-Colonial West Africa (London, 1980), p. 186.

One reason for disregarding muskets in modern histories of the making of the Saudi state comes from a misreading of an early European account. An extensive study of this state's military organisation, Saudi historian Muhammad El-Shaafy's doctoral thesis, maintained that 'in the earliest part of their career' Saudi warriors were 'as ill equipped with arms as with men'. He claimed that they had only a few 'fuse rifles' of poor quality and preferred primitive arms: sabres, lances, and *kanterieh* (iron-tipped wooden darts).⁴⁵ Historians have relied on these impressions to argue that Saudi expansion depended at first on monotheistic zeal or ideological persuasion, not modern weapons or new military tactics.⁴⁶ However, El-Shaafy based his description entirely on an uncritical reading—actually, a slightly misleading translation—of the account of a French Orientalist who never ventured into the heart of the Arabian Peninsula.

Louis Alexandre de Corancez's essay on the Wahhabis, published over 50 years after the earliest Saudi raids, argued that the Wahhabis would be 'invincible' if they had any 'discipline', but that they lacked it altogether and had 'no knowledge of the military art'. Besides, he continued, 'their weapons are very bad. Their matchlocks (fusils à mêche), the only [guns] they know, are rare amongst them.⁴⁷ El-Shaafy used this text to describe early Saudi weapons. But de Corancez had written about conditions and prospects in the present and subjunctive tenses, not in the past tense. His intention had been to describe the situation around 1804, not 1744. Furthermore, he was not an objective observer. He relied heavily on the reports of outsiders, especially (or so he claimed) the narration of a Maronite Christian.⁴⁸ And his evaluations were coloured by a French Orientalist perspective. After all, he was a member of the scientific troop that accompanied Napoleon Bonaparte's military expedition into Egypt. These savants tended to view Arabs as semicivilised peoples who lagged behind Europe in science and technology.⁴⁹ To contemporary French readers, de Corancez's description meant two things: first, that the Wahhabis would be a greater threat if they waged war like professional uniformed soldiers trained in tactical formations; and, second, that they carried outdated weapons, the European firearms of the sixteenth and seventeenth centuries, not the flintlock rifles of the eighteenth century such as the Napoleonic infantry's 'corrected' models of 1777. These assessments would be valuable, if the goal were to compare the French and Saudi militaries from the vantage point of a European consul who had never set foot in Najd, nor seen a Saudi soldier with his own eyes. They reveal nothing about the efficacy of Saudi firepower in an Arabian context.

⁴⁵ El-Shaafy, 'First Sa'udi State', p. 152; Muḥammad ibn Sa'īd al-Sha'afī, *Tanẓīmāt al-dawlah al-Sa'ūdīyah al-ūlā* (Riyadh, 2010), pp. 150–151. Although it was published half a century later, the Arabic version of this thesis is not a major revision. Also see Jerzy Zdanowski, 'Military organization of the Wahhabi Amirates (1750–1932)', *New Arabian Studies* 2 (1994), pp. 130–139, at p. 135. Zdanowski claims that during the Emirate of Dir'iyya 'firearms were known but not commonly used' (p. 135). How he reached this conclusion is unclear. He cites Félix Mengin, *Histoire de l'Égypte sous le gouvernement de Mohammed-Aly, ou Récit des événements politiques et militaires qui ont eu lieu depuis le départ des Français jusqu'en 1823*, (eds) Louis Langlè and Edme-François Jomard (Paris, 1823), Vol. ii, p. 174. However, on that page Mengin explains that Najd's merchants imported lances, pikes, gun barrels (*canons de fusils*), and lead from Baghdad and Başra. In the appendix, 'Précis de l'histoire des Wahabys', Mengin mentions gunshots in multiple battles from the years 1750 to 1770 (pp. 454, 457, 467, 472) as well as large numbers of guns (1,000, 2,500, and 3,000) acquired as tribute or booty in the following decades (pp. 499, 516, 523).

⁴⁶ Fahad, 'The `Imama vs. the `Iqal', p. 43; Cook, 'Expansion', p. 675, and note 196.

⁴⁷ Louis Alexandre de Corancez, *Histoire des Wahabis, depuis leur origine jusqu'à la fin de 1809* (Paris, 1810), pp. 22–23.

⁴⁸ Giovanni Bonacina, The Wahhabis Seen Through European Eyes (1772-1830): Deists and Puritans of Islam (Leiden, 2015), pp. 69, 73.

⁴⁹ Leor Halevi, Modern Things on Trial: Islam's Global and Material Reformation in the Age of Rida, 1865–1935 (New York, 2019), Prologue.

Firearms in eighteenth-century Najd

European travel literature offers few glimpses of the early spread of firearms into the hands of Arabs, but outside of Najd. One of the seventeenth century's great travellers, Jean-Baptiste Tavernier, recounted how, around 1639 in the Syrian Desert, he met an *Arab Schek* and legal expert (*Chef de la loy*) on pilgrimage to Mecca who had been badly wounded by a musket-shot (*coup de mousquet*) and benefitted from his surgeon's ministrations.⁵⁰ The Chevalier d'Arvieux spent several months in the company of the Bedouin of Mount Carmel in 1664. Generalising about scattered nomads who lacked 'kingdoms over which they are absolutely the masters', he wrote: 'The Arabs have no other arms besides a lance, a sword, an iron mace, & sometimes a poleax.... The report of gunpowder terrifies them. They detest firearms and can hardly grasp why they kill men without touching them.'⁵¹

Eighteenth-century travelogues could not make such claims, since they saw plenty of firearms among Arabs. Thus, Bartholomew Plaisted, an East India Company surveyor, revealed why and how far guns were spreading in the Syrian Desert, which he crossed in 1750. Travelling with a camel caravan, he was told that 'three hundred musqueteers' guarded it, but he did 'not believe there were above half so many'. Whenever the caravan reached a hill or other suspicious place where an ambush could be laid, 'then all the camel-men [would] light their matches' in the hope of scaring away robbers who had 'nothing but lances and swords'. To impress Arab robbers with 'the courage of Europeans', he advised English travellers to carry a 'fusee, a pair of pistols, and a sword'.⁵² A few decades later Henry Abbott, a British-Levantine merchant, recounted that during his travels in the same desert he had offered some assistance to a wretched antelope hunter whose entire property, matchlock included, 'could hardly [be] worth more than two or three piasters'.⁵³ And Carsten Niebuhr, lone survivor of the 1760s royal Danish expedition to Arabia and author of the earliest European account of the Wahhabis, never made it to the interior of the peninsula. He did not specify what weapons the Najdis had when he described them as warriors who were 'almost always in arms'. However, he described the martial nomads of the southwestern province of Dsjöf (al-Jawf) as possessing sabres and lances as well as some matchlock muskets. 'They still make use of coats of mail,' he revealed, 'an armor that the other Arabs no longer wear.⁵⁴

⁵⁰ [Jean-Baptiste Tavernier], Les six voyages de Jean-Baptiste Tavernier, Ecuyer Baron d'Aubonne, en Turquie, en Perse, et aux Indes: Pendant l'espace de quarante ans, & par toutes les routes que l'on peut tenir, accompagnez d'observations particulieres sur la qualité, la religion, le gouvernement, les coûtumes & le commerce de chaque païs; avec les figures, le poids, & la valeur des monnoyes qui y ont cours, part 1, Où il n'est parlè que de la Turquie & de la Perse (Paris, 1679), p. 170.

⁵¹ Laurent d'Arvieux, Voyage dans la Palestine, vers le Grand Emir, Chef des Princes Arabes du Désert, connus sous le nom de Bedouïns, ou d'Arabes Scenites, qui se disent la vraïe postérité d'Ismaël fils d'Abraham: fait par ordre du roi Louis XIV, (ed.) M. de la Roque (Amsterdam, 1718), pp. 94, 96, 97. D'Arvieux speculated in his memoirs that the Arabs would be able to throw off the yoke of the Turks if they took up guns. See Jean Baptiste Labat (ed.), Mémoires du chevalier d'Arvieux... contenant ses Voyages à Constantinople, dans l'Asie, la Syrie, la Palestine, l'Egypte, & la Barbarie... (Paris, 1735), Vol. iii, p. 148.

⁵² Bartholomew Plaisted, 'A journal from Busserah to Aleppo, etc.', in *The Desert Route to India. Being the Journals* of Four Travellers [*i.e. William Beawes, Gaylard Roberts, Bartholomew Plaisted and John Carmichael*] by the Great Desert Caravan Route between Aleppo and Basra, 1745-1751, (ed.) Douglas Carruthers (London, 1929), pp. 68–69, 95, 118.

⁵³ The event happened near the tomb of Qal^cat Ṣāliḥ, a few miles north of Baṣra. Henry Abbott, A Journal, with Occasional Remarks, Made on a Trip from Aleppo to Bussora, across the Grand Desart of Arabia (Calcutta, 1789), p. 81.

⁵⁴ Carsten Niebuhr, Voyage en Arabie et en d'autres pays de l'Orient, avec l'extrait de sa description de l'Arabie et des observations de Mr. Forskal (Switzerland, 1780), Vol. ii, pp. 68 and 139; Carsten Niebuhr, Beschreibung von Arabien: aus eigenen Beobachtungen und in Lande selbst gesammleten Nachrichten (Copenhagen, 1772), pp. 276, 345. He referred to the musket as a 'Flinte mit einer Lunte.'

To get a sense of the early spread and impact of guns in Najd, there is no better source than the first Arabic chronicle of the Saudi campaigns by a Wahhabi writer who had learned his history and theology in Dir⁶iyya. Ibn Ghannām (d. 1810) refers to bullets (raṣāş) and muskets (banādiq) in anecdotes which suggest that guns played a not-insignificant role in internal Najdi warfare. In the first battle between the forces of Dir⁶iyya and Riyadh, which took place in the town of Manfūḥa *around* 1159 AH (*circa* 1746 CE), Saudi shooters fired from rooftops at Riyadhi invaders who had taken over a castle.⁵⁵ They killed nearly a dozen 'wicked sinners' and brought about the rout of the rest. They failed to kill Riyadh's chief, Dahhām ibn Dawwās, but at least managed to shoot his stallion and blast away his toes. Three years later, an assault on al-Ḥabbūniyya, a tiny, godforsaken settlement by Riyadh, involved a shoot-out between Saudi marksmen, who managed to scale the towers, and residents below. Ibn Ghannām heard of the battle because ten men were killed (seven on one side, three on the other) and the Saudis destroyed the defensive walls before retreating.⁵⁶

Though these gunfights may sound trivial militarily, they happen to be among the first ones in recorded Najdi history. If Najd's inhabitants used firearms in the seventeenth century, Najd's annalists did not memorialise it. Admittedly, the bare-bones chronicles of Ahmad al-Manqūr (d. 1713), Muhamamd ibn Rabī^ca (d. 1745 cE), and other pre-Saudi annalists left much to readers' imagination; their records of significant events of this or that year are unbelievably sparse.⁵⁷ Yet one of the few themes that they dwelt on was death: repeatedly they recalled sensational disasters and battles that cost many lives. They remembered 1072 AH (1661 CE) as the year when a 'great army' from al-'Uvayna marched towards al-Bi'r and the settlement's walls collapsed on them, killing many invaders. They recalled the year 1137 AH (1724 CE) for the famine that continued, despite the abundant rain that finally fell after a severe, widespread drought. In 'Unayza alone, a rabid, burning hunger (al-su'r) 'consumed' 42 souls.⁵⁸ Despite this emphasis on death, with the occasional reference to its causes, not once, it seems, did Najd's annalists credibly recall the use of muskets or cannons before 1720-an absence of evidence that suggests that firearms, if present, did not cause memorable or striking numbers of deaths.⁵⁹ As an exception, one might cite a story about the banishment of a Banū Wā'il clan from Ushayqir by their tribal neighbours, the Wuhaba clan, who mounted the town's watchtowers with guns, bullet-shooting crossbows, or pellet bows (banādiq-firing weapons) to prevent the exiled community from returning home. However, the event lay in such a remote past (circa 700 AH, 1300 CE) that its historical remembrance was akin to historical fiction.⁶⁰

By contrast, when Wahhabi chronicler Ibn Bishr (d. 1873) reflected on the events that followed Ibn 'Abd al-Wahhāb's pact with Dir'iyya's chief, he repeatedly brought up guns.

⁵⁵ Many of the dates given by chroniclers should be taken as approximations. Typically, I will convert the Hijri year to a single CE year, selected from two possible years.

⁵⁶ Husayn Ibn Ghannām, *Tārīkh Ibn Ghannām*, (ed.) Sulaymān ibn Ṣāliḥ Kharāshī (Riyadh, 2010), Vol. ii, pp. 676, 685–686.

⁵⁷ On the genre, see the preliminary study by Michael Cook, 'The historians of Pre-Wahhābī Najd', *Studia Islamica* 76 (1992), pp. 163–176.

⁵⁸ "Tārīkh Ibn Rabī'a', in *Khizānat al-tawārīkh*, (ed.) Āl Bassām, Vol. iii, p. 34; 'Tārīkh Ibn 'Īsā', Vol. ii, pp. 65–66. Though written several generations after the events, the latter chronicle quotes earlier, unpublished ones.

⁵⁹ My efforts to locate keywords indicating or suggesting the use of firearms (for example, *banādiq*, *madāfi*^c, *raṣāṣ*, *fatīl*, *ramā*, and multiple derivatives) in histories of Najd prior to the year 1157 AH (1744 CE) yielded few results. I did not find this terminology in the annals of Aḥmad al-Manqūr (d. 1713) and Ibn Rabī^ca (d. 1745), nor for that matter in the chronicle of Muḥammad al-Fākhirī (d. 1860). The histories of Ḥamad ibn La^cbūn (d. 1839) and Ibn ^cĪsā (d. 1924), which quoted extensively from earlier annals, did use it, but sparingly and only in connection with eighteenth- and nineteenth-century events, with one exception.

^{60 &#}x27;Tārīkh Ibn 'Īsā', Vol. ii, p. 25.

Thus, for example, in his narrative of the year 1161 AH (1748 CE), he wrote: 'There was no combat that day', the first day of the Battle of al-Bunayya, 'except for shooting with muskets from afar'. Alongside a few deaths, the initial skirmish made 'their hearts' tremble with terror (ru'b). What weapons combatants used over the next few days is unknown; however, it is hard to imagine the men laying their guns down to fight solely with sabres, lances, and darts. The final death toll was high by Najdi standards, with scores of casualties on each side.⁶¹

This was not Ibn Bishr's earliest reference to firearms. 'The Antecedents', his brief chronicle of events from 1446 to 1744 CE (850 to 1156 AH), reveals that guns started to matter in the 1720s. In 1133 AH (1721 CE), the chief of the Banū Khālid tribal confederation, Sa'dūn ibn Muḥammad ibn Ghurayr, invaded Najd and 'showed the cannons' of the Eastern Arabian region that he ruled, al-Aḥsā'. The impact on Dir^ciyya was great. His troops plundered houses in three quarters (al-Ṣahra, Malwā and al-Sarīḥa) and killed many residents. A few years later, in 1139 AH (1726 or 1727 CE), guns played a role in the treacherous assassination of Dir^ciyya's chief, Zayd ibn Markhān. Greedy for the goods of al-^cUyayna, whose defenders were emaciated in the wake of an epidemic, Ibn Markhān set off on a raiding expedition with a band of followers. When they reached the area, al-^cUyayna's ruler, Muḥammad ibn Ḥamad ibn 'Abdallāh ibn Muʿammar, asked to negotiate a settlement. Dir^ciyya's chief agreed and entered his castle with 40 men to discuss terms. But the moment he sat down for the assembly, assassins 'shot him with two muskets and, since they did not miss, he died'.⁶²

An episode of diplomacy by other means thus led to the succession of Muḥammad ibn Saʿūd. Had the first draft of Saudi history not been written by Wahhabi authors, historians today would begin their narratives of the dynasty's foundation in 1726 or 1727, with this story about gunshots, rather than in 1744, with a suspiciously teleological presentation of Ibn 'Abd al-Wahhāb's aspirational plan for an Islamic regime.⁶³

In his accounts of the gunfights of the 1740s onwards, Ibn Ghannām often indicated features of the built environment, such as Ḥabuniyya's towers and Manfūḥa's rooftops, that give a good idea of firearms' possibilities and limitations. Whereas Western historians have emphasised geographic obstacles to state expansion in Central Arabia, Najd's own chroniclers took the desert for granted and focused instead on oasis towns' defensive structures. The desert was traversable in the span of days; walls and doors were not.

Fortified settlements had dotted the region since early Islamic times. Al-Falaj's famous marketplace had formidable fortifications during its heyday. In the fourteenth century, several Najdi towns boasted strong defences. It is not clear if these were exceptional or representative, well maintained or in ruins.⁶⁴ What matters for our purposes is that a wave of military construction began in the late seventeenth century, a few decades before the Saudi invasions. 'Unayza, Thādiq, and Riyadh raised fortified structures around 1678, 1723, and 1737. Burayda enclosed itself within a wall, its first wall, around 1740, before the

⁶¹ Ibn Bishr, ⁽Unwān, Vol. i, pp. 56. Ibn Ghannām's account (*Tārīkh*, Vol. ii, p. 682) also refers to long-distance shots but without specifying firearm usage.

⁶² Ibn Bishr, 'Al-Sawābiq', in 'Unwān, Vol. ii, pp. 363 and 368–369. Mūsā ibn Rabī'a, a former chief of Dir'iyya, was also killed by a gunshot in the latter episode. On the events mentioned, also see 'Tārīkh Ibn La'būn', in *Khizānat al-tawārīkh*, (ed.) Āl Bassām, Vol. i, pp. 149 and 153.

⁶³ While this article was in production, Saudi Arabia's king decreed that 22 February 1727 would be adopted as 'Founding Day' and commemorated annually as a national holiday. Soon thereafter, a contributor to Wikipedia rushed to revise the emirate's foundational year from 1744 to 1727, but failed to do so systematically. This messy revisionist turn is part and parcel of the Saudi monarchy's recent efforts to adopt a more secular or less Wahhabi narrative of history. On the broader process, see Rosie Bsheer, *Archive Wars: The Politics of History in Saudi Arabia* (Stanford, CA, 2020).

⁶⁴ Al-Juhany, Najd, pp. 30, 55, 41, 93-94.

death of its emir Humūd al-Duraybi.⁶⁵ Throughout Najd, it seems, castle walls were reinforced, garrisons were built, watchtowers were erected. By 1748, little forts in the environs of towns—including al-Bunayya, whose name indicated its diminutive size—were offering some refuge from gunfire.⁶⁶ The fortification process continued in the second half of the eighteenth century, evidently advancing with the threat of conquest and the spread of muskets. Around 1758, at a juncture when Dir^ciyya was still very much on the defensive, its ruler ordered the building of towers and castle walls to protect the city and urged allies to take similar measures.⁶⁷ To pressure enemies and wavering allies, the Saudi emirate also started at this time to build a series of fortified frontier outposts, beginning with al-Ghadhawāna—hastily constructed in the aftermath of a gunfight against Riyadh.⁶⁸ In some cases, the success or failure of a garrison depended mainly on the resilience of fortress walls and the efficacy of muskets.⁶⁹

Though there were many attempts to overcome built barriers, the vast majority failed. Artillery had long served to destroy castle walls elsewhere, with profound military and political consequences. But it was neither widely available nor sufficiently effective in eighteenth-century Najd.⁷⁰ Large-calibre guns were of little use in internal offensives, characterised by campaigns whose success depended on light weapons and swift mounts. Trials with them began, however, as a result of foreign incursions. By 1178 AH (1764 cE), one of the Saudi emirate's greatest foes, 'Uray'ir ibn Dujayn, the chief of the Banū Khālid clan and the new lord of al-Aḥsā', had acquired cannonballs and cannon (*qunbur wa-l-madāfi*'). These weapons were not powerful enough, however, to destroy Dir'iyya's thick, resilient fortifications.⁷¹ Years later, in 1195 AH (1781 cE), his successor, Sa'dūn ibn 'Uray'ir, aimed his cannon at al-Bid^c, a hastily erected southern fort, yet failed to breach the walls. The following year, lacking cannons during a long march to the northern district of al-Qaṣīm and the ensuing siege of Burayda, then under Saudi control, his army's smiths scrounged for 'all kinds of brass' and tried to cast barrels on the spot, without success.⁷² And in 1791, the Sharif of Mecca, Ghālib ibn Musā'id (r. 1788–1813), had his forces

⁶⁵ *Ibid.*, pp. 109 and 122; Soraya Altorki and Donald P. Cole, *Arabian Oasis City: The Transformation of 'Unayzah* (Austin, TX, 1989), p. 16. These authors argue that the building of walls indicates population growth. Perhaps it did, but what can be safely concluded is that it indicates common defensive concerns as well as political coordination.

⁶⁶ Ibn Ghannām, *Tārīkh*, Vol. ii, pp. 682–684, mentions al-Bunayya and al-Ḥurayyis in the record of year 1161 AH. If al-Bunayya's walls were razed on this occasion, as the story boasts, then they were rebuilt for the next battle.

⁶⁷ Ibid., Vol. ii, p. 751.

⁶⁸ *Ibid.*, pp. 749, 760, 830. Ibn Bishr, ^CUnwān, Vol. i, p. 79, gives the first fort a different name. About this discrepancy and two other 'frontier' outposts (*thughrūr*), al-Ḥulayla and al-Bid^c, see George S. Rentz, *The Birth of the Islamic Reform Movement in Saudi Arabia: Muḥammad Ibn 'Abd al-Wahhāb (1703/4-1792) and the Beginnings of Unitarian Empire in Arabia*, (ed.) William Facey (London, 2004), pp. 87, 98, 172–173. El-Shaafy, 'First Sa'udi state', pp. 149–150 and 163–168, may also be consulted; note, however, that the date given for the first fort—1178 AH—should be 1171 AH (1757–58 CE).

⁶⁹ By far the best example of this is the 1202 AH (1787 CE) battle for al-Dawāsir wadi that the Makhārīm tribe initiated. It involved the frenzied building of new forts by both sides, crumbling walls, and plenty of gunfire. In the course of this battle, the Saudi state equipped the Makhārīm with money (*māl*), provisions (zād), and weapons (*silā*ħ). For an account, see Ibn Ghannām, *Tārīkh*, Vol. ii, pp. 866–869.

⁷⁰ An early French history of the Wahhabis recognised this, remarking repeatedly on the lack and failures of artillery during regional sieges: Mengin, *Histoire*, Vol. ii, pp. 463–464, 485, 487, 495, 511, 538.

⁷¹ Ibn Bishr, 'Unwān, Vol. i, pp. 97–98; Ibn Ghannām, Tārīkh, Vol. ii, pp. 773. While acknowledging the role of Ottoman-Egyptian artillery in the 1818 invasion of Dir'iyya, William Facey has argued that cannons used earlier were 'singularly ineffective' against 'mud defences'. William Facey, *Dir'iyyah and the First Saudi State*, with photographs by Philip Hawkins (London, 1997), p. 56. Also see Zdanowski, 'Military organization', p. 134; El-Shaafy, 'First Sa'udi state', p. 70.

⁷² Ibn Ghannām, Tārīkh, Vol. ii, pp. 841-842.

pummel a Saudi fort in the town of al-Sha^crā⁷ with seven cannons whose shots had been reinforced with iron bars and chains. Even this show of force had limited effect. The sharif's army spent such a long time besieging the Saudi emirate's small western outpost that a decision was made to retreat to Mecca rather than press on with the campaign.⁷³

Only in the nineteenth century, in connection with the Ottoman-Saudi war, do we hear of more effective use of artillery by both sides. By the 1810s, a fair number of large-calibre guns would fall into Saudi hands. Mainly, the military would use these weapons defensively—to protect fortified towns and garrisons. This made defeating the Saudi state, which now stretched from the Persian Gulf to the Red Sea coast, all the more challenging. It would take the strength of Ottoman Egypt's siege artillery, which bombarded Najd's Saudi cities between 1816 and 1818, to finally breach Dir'iyya's shock-resistant mud-brick walls.⁷⁴ But this turn of events came late. Earlier in the history of the Saudi state, fortifications proved more than adequate for defence against artillery and, of course, musketry.⁷⁵ Repeatedly foiling besiegers who lacked patience and resources, they were the main physical barriers to state expansion within and beyond Najd.⁷⁶

Other means were therefore sought to enter fortified towns. Digging a hole through the walls under the cover of night was one way. When Saudi raiders tried this tactic against Tharmadā⁵ in 1171 AH (1757 CE), they discovered—to their misfortune—that guards had noticed their plan and apprised the town's slaves, who headed out of town at dawn, as if to work in the surrounding date palm fields, but then helped trap the invaders by the breach.⁷⁷ Ladders were an obvious solution, too. They worked well—but only when the enemy was caught off guard. Otherwise, the predictable result was the death of the invaders.⁷⁸ Sawing off a wooden gate was yet another possibility, although the risk of death from defensive fire was high.⁷⁹ A besieged town would contrive a simple solution: sealing the door with mud.⁸⁰ Cross-dressing in seductive women's clothes was another technique to gain ingress, but when male warriors tried this ruse against al-Majma^ca, a Saudi fort in Sudayr, they failed to tempt the garrison's men.⁸¹ One ingenious stratagem might really have worked: a wooden box on wheels designed to shield and

⁷³ Ibn Bishr, 'Unwān, Vol. i, pp. 175–176. It is unclear if the siege succeeded, as remarked in Rentz, Birth, p. 222.

⁷⁴ In 1811 France's vice-consul in Egypt, Bernardino Drovetti, reported that, during the battle to defend the garrison of the Red Sea port of Yembu (Yanbu^c al-Baḥr), Wahhabi forces, supported by at least 16 cannon, inflicted many casualties on the Egyptian regiment under Ahmed Tousson Pasha's command. A subsequent French consular report on Dir'iyya's fall in 1818, written by Joseph Roussel and sent to the duke of Richelieu, claimed that around 50 cannon arranged in batteries protected the capital. Édouard Driault, *Mohamed Aly et Napoléon (1807–1814)* (Cairo, 1925), p. 148; Édouard Driault, *La Formation de l'empire de Mohamed Aly de l'Arabie au Soudan (1814–1823): Correspondance des consuls de France en Égypte* (Cairo, 1927), p. 131.

⁷⁵ Although his account is of a late battle, Finati gives some insight into the ways even 'rude breastworks of loose stones' would work against musketry and artillery. He also mentions how command of castle walls 'by the musketry' could prevent besiegers from accessing water. Giovanni Finati, Narrative of the Life and Adventures of Giovanni Finati, Native of Ferrara; Who, Under the Assumed Name of Mahomet, Made the Campaigns against the Wahabees for the Recovery of Mecca and Medina; and Since Acted as Interpreter to European Travellers in Some Parts Least Visited of Asia and Africa, (ed. and trans.) William John Bankes (London, 1830), Vol. i, pp. 158, 279–280.

⁷⁶ This article provides sufficient examples of the significance of fortified walls in eighteenth-century Najdi warfare. Evidence beyond Najd is available elsewhere. Although it celebrates Saudi triumphs, ingenuity, and perseverance, a Saudi historian's thesis includes examples of the obstacles to expansion presented by defensive works in Jedda, Mocha, and al-Zubayr; see El-Shaafy, 'First Sa'udi state', pp. 161–162, 234, 237, 255–256.

⁷⁷ Ibn Ghannām, *Tārīkh*, Vol. ii, pp. 746–747. For a slightly different account of the battle, see Ibn Bishr, *'Unwān*, Vol. i, p. 77.

⁷⁸ Ibn Bishr, *Unwān*, Vol. i, p. 144.

⁷⁹ Saudi forces tried this at least once, with success, in a revenge attack on Dahhām ibn Dawwās's castle in Riyadh. See Ibn Ghannām, *Tārīkh*, Vol. ii, p. 676.

⁸⁰ Ibn Bishr, 'Unwān, Vol. i, pp. 137–138. This refers to the defensive measure taken by the Saudi garrison at al-Majma'a in 1193 AH, where the cross-dressing technique (cited immediately below) was tried as well.

⁸¹ Ibn Ghannām, *Tārīkh*, Vol. ii, p. 824.

transport a demolition crew safely, all the way to the walls. But accounts of its deployment on two separate occasions report malfunctions.⁸²

Hence, most of the fighting took place outside city walls. There were countless ambushes of caravans as well as crafty tactics designed to draw ensconced enemies out.⁸³ Raiding parties often hid in palm groves that surrounded towns or in sections of wadis that provided natural cover. These expeditions, when successful, yielded weapons, animals, and captives. Initially, the number of fighters involved was low and the material rewards correspondingly small. It is difficult to imagine how such events could culminate in state expansion. But success bred success. Even a modest victory meant additional military resources for the next battle and better prospects for building alliances. By the late eighteenth century, we hear of greater and greater yields.

Guns also made a difference in Saudi raids on grazing grounds. The aftermath of a raid for livestock belonging to al-Dilam, the capital of the fertile region of al-Kharj, had much to do with gunfire—or rather fear of gunfire. In 1165 AH (1752 CE), a band of around 40 Saudi raiders from al-^cUyayna travelled relatively far, around 150 kilometres southeastwards, to steal 'all of the freely grazing goats and sheep'. They succeeded in taking the animals, but a hundred aggrieved Dilamis decided to track them down. They caught up with them at a junction of wadis, and the battle began, with each side firing its guns expertly, 'from afar'. Greatly outnumbered and finding no way to escape but confronting an enemy that was so afraid of getting shot that it stayed put at a safe distance, the Saudi raiders decided to rush forward. Surprisingly they won, killing around 30 men and seizing weapons and mounts.⁸⁴ Such expeditions continued, although they grew in size and brought more livestock. Thus, four decades later, Saudi shooters proved their worth in a battle against a Bedouin confederation that took place in northern Najd's Mount Shammar in 1205 AH (1791 CE). To shield themselves from gunfire, the Bedouin decided to attack the Saudi camp at twilight behind a wall of camels. Saudi gunmen bided their time to open fire until the camels nearly reached them. Soon thereafter the camel drivers began to flee. Saudi soldiers pursued them for several days and in the end gained dozens of horses and thousands of camels, sheep, and goats.⁸⁵

The raids for the animals of al-Kharj oasis and Mount Shammar were not evidently part of any plan for conquest, but guns were instrumental in the Saudi coalition's effort to turn autonomous towns into tributaries. In 1170 AH (1756 CE), the emir's son 'Abd al-'Azīz ibn Muḥammad ibn Sa'ūd (r. 1765–1803) led a northwestern campaign towards the settlement of Thādiq, more than a hundred kilometres from Dir'iyya. A firefight began in the palm groves. Tree trunks served as barriers. Effective shooting gave the Saudis the cover that they needed to cut down date palms. Consequently, the townsmen grasped what 'the Muslims' (as the Wahhabi chronicler called them) 'were wont to do'. Thādiq lost eight men. Beleaguered, the town had 'no choice but to turn to Islam for respite'. Upon their surrender, supplicants from Thādiq were forced to march to Dir'iyya, where they had to accept a judgement (qadiyya) from the shaykh, Ibn 'Abd al-Wahhāb, that, among other things, entailed the establishment of a Wahhabi missionary in their town. His charge was to indoctrinate them with monotheism and bring into effect the

⁸² Rentz, *Birth*, pp. 173 and 178, specifies that Ibn Ghannām referred to the fortified box as a *muntar*īs or *mintar*īs; this is the same term used to describe the wall of camels in the 1205 AH battle at Jabal Shammar. On wheeled siege-boxes, also see Zdanowski, 'Military organization', p. 135.

⁸³ For an early example, note the raids of the palm groves that were designed to draw out Manfūḥa's defenders following a sly infiltration (Ibn Ghannām, *Tārīkh*, Vol. ii, pp. 675–676).

⁸⁴ Ibn Ghannām, Tārīkh, Vol. ii, p. 691.

⁸⁵ *Ibid.*, pp. 897–898; Ibn Bishr, *'Unwān*, Vol. i, pp. 176–178. Ibn Bishr piously added that a fifth of the spoils was set aside for the state's treasury, in accordance with Islamic rules, and that the rest was divided between the troops at the ratio of two shares for each horseman to one share for each foot soldier.

rules of the shari^ca. They must not have appreciated the sentence since they joined a rebellion against Saudi rule two years later. When the rebellion failed, they were forced to beg for forgiveness and accept harsher terms: a crippling agricultural tax.⁸⁶

The casualty toll may seem trivial in this case, but it is important to bear in mind that Najd was sparsely populated. By external standards, Thādiq was just a village. It had roughly 1,200 inhabitants: 300 men capable of bearing arms and 900 children, women, and old and disabled men, according to Félix Mengin, a French merchant entrusted with consular affairs in Egypt. By this measure, eight dead men meant the loss of 2 to 3 per cent of its irregular fighting force.⁸⁷ Al-Dilam, which lost 30 men in 1752, was not much larger. Yes, it was al-Kharj's capital. But a gazetteer from the turn of the twentieth century reckoned that it had 300 houses and a population of 1,500. Maybe it had more residents around 1752, when Saudi raiders descended on it. Nonetheless, 30 fatalities was devastating.⁸⁸ Plus, al-Dilam's submission came at the end of a long series of raids and battles. Eight more Dilamis would die around 1760, 16 in the 1770s, 20 in 1785.⁸⁹ The toll was cumulative.

The critical thing to note in the account of Thadiq's submission is that agricultural sabotage, a tactic that Saudi troops used effectively to pressure Najdi towns to surrender, depended on the threat of gunfire. Now and then in pre-Saudi Najd, tribes had targeted settlements by cutting down their palm trees: the 'Anaza did this to 'Ushayra in 1100 AH (circa 1688 cE).⁹⁰ Enemies of the Saudi emirate would resort to this tactic, too, at least on occasion: they did so to some extent during the sieges of al-H \bar{a} 'ir and al-Majma^ca in the 1770s as well as, many years later and with the intent to wreak utter devastation, during the Battle of Dir^ciyya.⁹¹ Saudi forces destroyed date palms with unprecedented frequency, however. They tallied fallen trees much as they tallied fallen men, remembering the exact number. Thus, an 1161 AH (1748 CE) expedition against Riyadh's oasis resulted in the killing of six local defenders and the felling of four palm trees.⁹² Almost a decade later, in the course of their 1170 AH (1756 CE) raid on Manfūha, which had fallen into rebellion, the Saudis took the campaign for food insecurity to the next level. They demolished a structure that had been erected to restrict the flow of the torrent, destroying the foundation of the town's irrigation system.⁹³ In 1195 AH (1781 CE), during al-Dilam's short siege, they reportedly cut down 2,000 palm trees.94 Other historians have commented on the 'economic pressure' that they

⁹⁰ 'Tārīkh Aḥmad al-Manqūr', in *Khizānat al-tawārīkhk*, (ed.) Āl Bassām, Vol. iii, p. 19.

⁹³ Ibid., p. 741.

⁸⁶ Ibn Ghannām, $T\bar{a}r\bar{i}kh$, Vol. ii, pp. 744–745 and 752–753. The tax was of half the crop (*al-zar*) and the fruit yield (ray).

⁸⁷ Mengin, *Histoire*, Vol. ii, p. 163.

⁸⁸ John Gordon Lorimer, *Gazetteer of the Persian Gulf, 'Omān, and Central Arabia. Vol. ii: Geographical and Statistical* (Calcutta, India, 1908), p. 460. Also see the estimates of al-Dilam's surrounding hamlets and forts in H. St. J. Philby, *The Heart of Arabia: A Record of Travel and Exploration* (New York, 1923), Vol. ii, pp. 43 and 45.

⁸⁹ Rentz, *Birth*, pp. 92, 152, 161, 189. For comparison, see the careful tallies kept by Cook, 'Expansion', pp. 689– 690, note 98, in connection with the Saudi battles against the villages of Washm. Cook described this process as 'notably light in touch' (p. 669) given the low casualty figures over two decades of war. The death of 350 fighters was not trivial, however, if the total number of warriors was of the order of 2,000 (p. 680, note 6).

⁹¹ Ibn Bishr, 'Unwān, Vol. i, p. 126; Ibn Ghannām, Tārīkh, Vol. ii, p. 825. On the Ottoman-Egyptian siege of al-Shaqrā², which surrendered when the army began to cut down palm trees, and on the destruction of Dir'iyya's date plantations, see G. Forster Sadlier, *Diary of a Journey Across Arabia from El Khatif in the Persian Gulf*, to Yambo in the Red Sea, During the Year 1819 (With a Map), compiled by P. Ryan (Bombay, 1866), pp. 119, 124.

⁹² Ibn Ghannām, *Tārīkh*, Vol. ii, p. 683.

⁹⁴ Ibn Bishr, 'Unwān, Vol. i, pp. 142–143. Ibn Ghannām, *Tārīkh*, Vol. ii, p. 830, specifies that palm and other trees were cut, but not how many.

exercised, but without explaining how they achieved it.⁹⁵ What, besides axes, enabled them to do this systematically? Surely, guns: muskets drove townsfolk to seek refuge behind walls, which gave besieging armies the opportunity to cut down trees with impunity.

Assessing the economic impact of such acts of destruction is difficult. Cutting down a few date palms would perhaps be an effective strategy against a hamlet with a few hundred trees. Towns such as al-Dilam or Manfūḥa, which might have had 10,000 trees or more, had to be intimidated through larger scale operations.⁹⁶ Recovery would take a long while since a palm tree needs several years of growth to begin bearing fruit. Perhaps, although our sources do not specify it, when palm trees were felled, the dates were harvested if they were ripe enough, kernels were kept for oil and fodder, and some of the wood was hauled for fuel and furniture. The alternative scenario, a scorched-earth policy, makes sense only as a strategy for driving an enemy to surrender. One way or another, in a region where food was scarce and agriculture essential for survival, this form of economic warfare doubtlessly affected decisions to capitulate.

Now, the veracity of each of Ibn Ghannām's stories cannot be confirmed. In stories about events that took place a generation or two before he sat down to write his chronicle, there must be inaccuracies and distortions. The historicity of details—the shooting of Riyadh's chief's toes, the firefight in Thādiq's groves—that lend his narrative a certain verisimilitude has to be doubted. From a source-critical perspective, Ibn Bishr's account, further removed from the events and thoroughly imbued with Wahhabi biases, is even more suspect. However, their descriptions of gunfights do not seem particularly dubious or contrived because they made no concerted effort to celebrate guns as their histories' heroes. They never took the trouble to describe the weapons technically. Often, they refer to bullets or shooting without explicitly mentioning guns. The description of their muskets as matchlocks comes from external (Arabic and European) sources, which present the typical Wahhabi gun not as the exalted cavalry's prestige weapon, but rather as the low-ranking infantry's standard arm. Furthermore, there is no compelling reason to doubt the patterns of warfare that Ibn Ghannām and Ibn Bishr brought to light.

Even if we take every single battle tale with a grain of salt, the whole collection of them makes it justifiable to contend that guns were regularly used in Najdi combats during the third quarter of the eighteenth century. It may or may not be true that firearms made their debut in Najdi history by the 1720s, as one might conclude from Ibn Bishr's 'The Antecedents'. But it seems plausible—especially if one pauses to consider the likely military impetus behind the building of fortifications around and near oasis settlements between the 1720s and the 1750s—that firearms grew into a force to be reckoned with in this period: they apparently stimulated different architectural responses (thicker and longer walls, watchtowers, frontier forts) for either defensive or offensive purposes.⁹⁷ Occasionally, as Wahhabi histories indicate, guns were a factor in firefights within walled towns. More often, they played a key role in *extra-muros* ambushes, livestock raids, skirmishes in the wake of raids, and brief sieges that are best described as acts of agricultural destruction. Such events happened repeatedly. They led targeted towns to surrender and ally themselves with the Saudi state not because they were persuaded by Wahhabism,

⁹⁵ Cook, 'Expansion', p. 690, note 101; El-Shaafy, 'First Sa'udi state', p. 123.

 $^{^{96}}$ For estimates of the number of date palms in al-Dilam and Manfūḥa, see Lorimer, *Gazetteer*, Vol. ii, pp. 460, 628.

⁹⁷ For a relevant comparison, note the fortification of the Syrian *hajj* route from the 1740s onwards. In a study of this development, an archaeologist has remarked on both the growing threat of Bedouin raiders' firearms and on the appearance of small gun-holes. See Andrew Petersen, 'The Ottoman conquest of Arabia and the Syrian hajj route', in *The Frontiers of the Ottoman World*, (ed.) A. C. S. Peacock (Oxford, 2009), pp. 81–94.

but because they feared the consequences of continued resistance and felt that they stood more to gain from submission.

Wahhabi chronicles do not, however, enable us to guess at the number of guns that Saudi warriors had during the early wars of expansion. For this, we might turn to European sources that give some idea of the spread of muskets, although in a later period—during the emirate's last two decades, when Saudi power extended beyond Najd's boundaries.

In 1807, the Spanish spy who passed for a Muslim under the name of ^cAli Bey witnessed the triumphant presence in Mecca, by then incorporated into the Saudi state, of an army of 45,000 Wahhabi pilgrims, most of them mounted on camels and bearing weapons. He estimated that all in all there were 83,000 pilgrims from various nations, including 2,000 women and 1,000 small children, and reckoned that the number of firearms in this great crowd was more or less equivalent to the number of Wahhabi men.⁹⁸ In 1814 and 1815, during the Ottoman-Saudi war, Burckhardt conducted quite an extensive survey of Bedouin communities of the Hijāz and their arms. He observed that some tribes still used the short lance, especially for close combat. When thrown like a javelin, this was also an effective weapon for fighting at a distance on desert plains. But in rocky and mountainous areas, the matchlock was the weapon of choice. (The environmental distinction is critical, since it helps to explain why guns were effective on Najdi terrain.) 'Every Bedouin' in Najd, Yemen, and the Hijāz, remarked Burckhardt, 'is armed with a matchlock'.⁹⁹

Burckhardt tried to take the measure of every tribe, no matter how small, in the mountains around Mecca and al-Tā'if and to give at least an educated guess as to Bedouin firepower in Najd. He discovered one new clan, the Ryshye, that transported goods between Mecca and Jedda but 'cannot muster above eighty matchlocks'. For the defence of its camp on Mount 'Arafāt, the renowned Quraysh tribe could count on just 'three hundred matchlock-men'. Many of the other tribes of the Hijāzi highlands, where Burckhardt travelled, had between 500 and 3,000 guns. Some had suffered grave losses as a result of successive Saudi and Ottoman campaigns. Although a thousand of the finest marksmen of the Banū Hudhayl tribe had survived the upheavals, the Wahhabis had 'killed above three hundred of their best men before the tribe would submit'. Another group, the nomads of 'Adwan, had procured as many firearms in the recent past, but their alliance with the Saudi state cost them dearly with the turn of the times; they were 'nearly exterminated' by Muhammad 'Alī Pasha's army. Several kinship groups had many more weapons. Burckhardt estimated that the many branches of the Banū Harb, whom he styled 'the masters of Hedjaz' and characterised as one of the last tribes to yield to the Wahhabis, had 30,000 to 40,000 guns. Their firepower, though formidable, was not concentrated in any one place; it was widely scattered among numerous nomadic and sedentary communities. Their enemies, the Juhayna and 'Utayba tribes, had perhaps 8,000 guns each. As for the 'warlike tribe' of 'Asīr, it had the capacity to gather a force of 15,000 men with matchlocks. Burckhardt's figures for the tribes of Najd were less comprehensive and less reliable since they were based, as he freely admitted, on second-hand reports. With this caveat, he ventured to guess that the Banū Shammar had 3,000 or maybe even 4,000 matchlocks; and the Banū Muțayr, around 7,000.¹⁰⁰

⁹⁸ El-Abbassi, *Voyages*, Vol. ii, pp. 334–339. It seems unlikely that there were more than 50,000 pilgrims in Mecca that year. But even if Badia i Leblich's guess about the number of *hajjis* was way off, what seems reliable is his observation that roughly half of them had guns. For estimates of the total number of pilgrims between 1807 and 1873, see Erasme Achille Buez, *Une mission au Hedjaz (Arabie): Contributions à l'histoire du choléra* (Paris, 1873), p. 84.

⁹⁹ Burckhardt, Notes, Vol. i, pp. 53, 236.

¹⁰⁰ Burckhardt, Notes, Vol. ii, pp. 23, 26, 30–31, 38–44, 48. On 'Adwān's fate, see Eveline van der Steen, Near Eastern Tribal Societies during the Nineteenth Century (New York, 2014), p. 48.

How many gunmen could the Saudi emirate mobilise for war? According to Burckhardt, 'the united armies of all the southern Wahaby chiefs' that suffered a historic defeat at the 1815 Battle of Byssel (or Basal), as a result of a ruse by an Ottoman Egyptian army, consisted of 25,000 men. Nearly all of them were 'camel-riders and matchlock foot-soldiers' led by 500 horsemen. On the eve of this battle, the Swiss explorer, terrified, took refuge in the Great Mosque of Mecca, together with his slave and 'a good provision of biscuit'.¹⁰¹ But his estimate was not a fanciful one. The Italian mercenary Giovanni Finati, who fought in this battle, declared that at least 24,000 armed men assembled at the spot (Basille), a 'natural rampart of hills' close to the town of Turaba.¹⁰² Similarly, Ibn Bishr wrote that two 'Muslim' divisions, whose numbers swelled to 30,000 soldiers, presented themselves for the battle. Around two-thirds of them came from the tribes of 'Asīr, especially Zahrān and Ghāmid; the rest were apparently from Najd.¹⁰³

Accounts of other great gatherings of Saudi troops suggest that, by the turn of the century, the state indeed had the ability to deploy over 10,000 troops. For the sack of the holy Shi'ite city of Karbala, which probably took place on 20 April 1802, Ibn Sa'ūd took around 15,000 men with him. This, at least, was the estimate of Jean-Baptiste Rousseau, a resident of Iraq with diplomatic connections. Other French Orientalists gave different numbers, ranging from 12,000 Wahhabis mounted on 6,000 camels to an unbelievable 20,000 soldiers in total. Ibn Bishr did not estimate the number of raiders. Concentrating instead on the role of the elite horsemen, he mentioned that on Dhu'l-Qa'da 1216 AH, which ended on 3 April 1802, a cavalry that rode on horses of noble stock set out on a journey to despoil al-Ḥusayn's shrine. The warriors on this sectarian pillaging campaign, both city-dwellers and nomads, were drawn from Najd, the South (al-Janūb), the Ḥijāz, the Red Sea coast (al-Tihāma), and other places.¹⁰⁴ Another large Saudi force consisted of 18,000 warriors and 800 horsemen who were recruited from the same regions, according to Ibn Bishr, for the 1811 Battle of al-Ṣafrā', which the Ottoman-Egyptian army lost when it got trapped in the wadi's gorges.¹⁰⁵

When trying to give an impression of the total number of conscriptable men in all territories of the Saudi emirate at its zenith, around 1810, once the state had expanded well beyond Najd's boundaries, military historians have cited numbers ranging from 83,750 to 456,700. However low or high, the operational significance of these figures is doubtful since the state rarely mobilised more than 10,000 men. For some campaigns, it would ask several towns and tribes under its control to contribute every horseman and a specific number of camel-riding foot-soldiers. For others, it would summon all able-bodied adult men who owned a riding camel.¹⁰⁶ These forces, whose size and composition differed from one engagement to another, included reliable allies and recently subjugated enemies.

A different set of figures will bring us back to the question at the heart of this article. According to Mengin, Najd's cities and towns had a total population of 50,945 men capable of bearing arms and 231,020 women, children, and old or infirm men. (The capital, Dir'iyya, had 3,000 men of fighting age and 10,000 women and children.) In addition, by his reckoning, the Bedouin of Najd and surrounding countries could be coaxed or

¹⁰⁶ Burckhardt, Notes, Vol. ii, pp. 162–164; El-Shaafy, 'First Sa'udi state', pp. 128–137. The earliest estimate—of 50,000 warriors—was made by Harford Jones in his undated enclosure on 'The Whahaubees'.

¹⁰¹ Burckhardt, Notes, Vol. i, pp. 54, 312, 315.

¹⁰² Finati, Narrative, Vol. ii, p. 6.

¹⁰³ Ibn Bishr, 'Unwān, Vol. i, p. 370.

¹⁰⁴ M. R*** [Jean-Baptiste Rousseau], Description du Pachalik du Baghdad suivie d'une notice historique sur les Wahabis (Paris, 1809), p. 73; Raymond, Mémoire, p. 16; De Corancez, Histoire, p. 27; Mengin, Histoire, Vol. ii, p. 522; Ibn Bishr, 'Unwān, Vol. i, p. 257. With one exception, the French authors cited mistakenly dated the sack to the year 1801.

¹⁰⁵ Ibn Bishr, 'Unwān, Vol. i, pp. 322-323.

coerced to contribute 41,100 *fantassins* (infantrymen) and 8,620 *cavaliers* (horsemen) to the Saudi military. Transhumance, migrations, and undefined borders make it impossible to confine these nomadic groups to one geographical area, but it is safe to say that five of the tribes that he listed (Muṭayr, al-Suhūl, al-Dawāsir, Shammar, and Subay^c al-ʿĀriḍ) were firmly established in Najd; and, when asked to join expeditions, they could send (all together) 14,200 men to the infantry and 2,750 to the cavalry.¹⁰⁷ Counting tribesmen in the early nineteenth century was not an exact science. Mengin's estimates were relatively conservative, however. Muḥammad al-Bassām, a soldier who served in the Saudi army, would give higher estimates by a factor of two for three of those tribes.¹⁰⁸ If historians may rely on Mengin's more sober figures instead, then Najd had no fewer than 67,895 men (nomads and townsmen included) capable of bearing arms. Women were not counted as combatants, although one Ḥijāzi woman, Ghāliya of Turaba (d. 1818), ruled her tribe and became a famous 'Wahhabi' commander.

Now, for all their discrepancies, early nineteenth-century European and Arab sources penned on the western and eastern coasts of the Arabian Peninsula agreed on one critical thing: virtually every Bedouin and Wahhabi foot-soldier and camel-rider had a match-lock.¹⁰⁹ They constituted the bulk of the army. Elite soldiers and horse-riding cavalry did not necessarily carry guns. Traditionally, they had favoured ostentatious and expensive arms: Damascus steel swords, lances with precious metal inlays and ostrich feather ornaments, and outrageously pricey steel and iron coats of mail that were 'capable of resisting a ball'. Some Wahhabi knights adopted firearms, proudly flashing finely crafted muskets 'distinguished by particular names' that were passed from father to son.¹¹⁰ *Lam*^c *al-Shihab* held that 'today' even horsemen deigned to bear matchlocks.¹¹¹ The important point is that carrying guns was *de rigueur* for the infantry, not the cavalry.

Militarily, the spread of guns was an extremely significant factor in warfare during the last two decades of the Saudi emirate. But it mattered greatly earlier, too. Tens of thousands of guns did not suddenly materialise in Central Arabia around 1800. Firearms facilitated Saudi military successes against well-armed invaders from the south and the east, Najrān and al-Aḥsā⁵, from 1775 onwards. And the conquest of Banū Khālid territories in the late 1780s and early 1790s, which spelled expansion towards the Persian Gulf, depended on the previous accumulation of firepower inland.¹¹² The inevitable conclusion is that thousands of guns had entered Najd beforehand. This conclusion leads, in turn, to a pair of obvious questions: Where did these guns come from? How and why were Najdis able to acquire them?

The source of guns: industry or trade?

There were, in theory, four possible sources of firearms: raids, tribute, a local gun-making industry, and trade with the external world. Raids and tribute were certainly key sources

¹⁰⁷ Mengin, *Histoire*, Vol. ii, pp. 163–164. Branches of other tribes that he listed ('Utayba, Qaḥṭān, Zafīr, and 'Anaza) had also moved into Najd, which makes it impossible to divide the list neatly into Najdi and non-Najdi groups. On some of these movements, see Al-Juhany, *Najd*, pp. 65, 71.

¹⁰⁸ El-Shaafy, 'First Sa'udi state', pp. 132-134.

¹⁰⁹ Compare Burckhardt's Notes and Lam^c al-Shihāb, cited below.

¹¹⁰ Burchardt, Notes, Vol. i, pp. 53, 56, 236-238; and Vol. ii, p. 312. Also see Mengin, Histoire, Vol. ii, p. 178.

¹¹¹ *Lam^c al-Shihāb*, p. 182 (805).

¹¹² Wahhabi histories indicate that this tribal confederation had a formidable arsenal by the 1770s. But the region's accumulation of firepower began two centuries earlier, with Ottoman shipments of cannon, balls, match-locks, and shot. See Jon E. Mandaville, 'The Ottoman Province of al-Hasā in the Sixteenth and Seventeenth Centuries', *Journal of the American Oriental Society* 90.3 (1970), pp. 486–513 at 491–492, 500, 507–510.

of guns: over the course of time, the Saudi state expropriated thousands of firearms from vanquished foes.¹¹³ But Saudi warriors did not defeat gun-equipped enemies with sabres, lances, and iron-tipped darts; they also needed guns. Their victories within Najd allowed them to accumulate firepower and, eventually, to expand their state beyond the borders of Najd.¹¹⁴ Therefore, the deep question to ask is not about the source of Saudi guns; it is about the source of Najdi guns, and this leaves two possibilities to consider: local production and foreign commerce.

Lam^c al-Shihāb claims, as we have seen, that Dir^ciyya became a great gun manufacturer in Ibn 'Abd al-Wahhāb's time. What seems more plausible is the idea that by the 1810s, when the book was written, Saudi Najd had become the Arabian Peninsula's leading centre for assembling and fixing guns with a combination of domestic and foreign parts. An independent industry would have required significant state coordination and resources. For self-sufficiency, the land itself would have had to provide wood for gunstocks, metal for barrels, serpentine locks, and bullets, fibres for wicks or cords, and saltpetre, sulphur, and charcoal for black powder. To store and transport gunpowder in containers, protect the barrel, and reduce recoil shock, leather was extremely useful, too.

Najd had some of these materials in abundance. Apple of Sodom, known for its poisonous green fruit, and date palms were excellent sources of charcoal. Palm wood was entirely unsuitable for making gunstocks, but the tree's leaflets could be shredded and turned into cords. Tamarisk trees grew in oases, and carpenters used their wood to make everything from bowls and incense burners to massive doors.¹¹⁵ Perhaps they also served to make gunstocks, although that is not clear. The thorny acacia trees that exude gum arabic are likely to have grown in Dir^ciyya's valley, Wādī Ḥanīfa, and their extremely hard, durable wood was actually used in a neighbouring country, Oman, to make matchlock stocks.¹¹⁶ Camel, goat, and sheep skins could be cured and tanned to craft every leather contrivance, including butt pads. This was convenient, yet something else made the animals indispensable-their urine and excrement. Charles Doughty's Travels in Arabia Deserta described how Bedouin gathered 'gun-salt' from shady spots and by watering holes where flocks tended to leave a mass of droppings. To produce gunpowder, they would boil the weathered dung with straw, then mix the resulting saltpetre crystals with charcoal and sulphur, which could be bought at Medina. Doughty witnessed this production method in the 1870s; perhaps it was developed earlier.¹¹⁷

It is theoretically possible that the first Saudi state obtained metals to manufacture lock, stock, and barrel from mines in Najd and surrounding regions. Iron was the essential element for the barrel, typically made of wrought iron, cast iron, or crucible steel. Brass

¹¹³ Wahhabi chroniclers often referred to tributes of weapons; only on occasion (and relatively late in their histories) did they specify the type and volume. According to Ibn Ghannām, *Tārīkh*, Vol. i, p. 873, the Saudi state got a tribute of 2,000 *riyāl* and 1,000 muskets (*atfaq*) with the submission of the lords of al-Dawāsir wadi in 1202 AH (1788 CE). Usually, Ibn Ghannām refers to muskets with the term *banādiq*; *atfaq* [sic] is unconventional. According to Ibn Bishr, *'Unwān*, Vol. i, p. 284, 2,500 guns were seized with the conquest of Jedda in 1219 AH (1805 CE). Additionally, Mengin, *Histoire*, Vol. ii, pp. 516 and 523, refers to the capture of 3,000 and 2,500 guns in his narratives of the 1798 battle of al-Khurma and the 1801 sack of Karbala.

¹¹⁴ Ibn Bishr, 'Unwān, Vol. i, p. 216, understood the 1210 AH (1796 CE) conquest of al-Aḥsā' in these terms, as an event that depended on the formidable application of firepower.

¹¹⁵ James P. Mandaville, Bedouin Ethnobotany: Plant Concepts and Uses in a Desert Pastoral World (Tucson, AZ, 2019), pp. 150–154.

¹¹⁶ James Raymond Wellsted, Travels in Arabia (London, 1838), Vol. i, p. 284. Also see Robert Elgood, The Arms and Armour of Arabia in the 18th-19th and 20th Centuries (Aldershot, 1994), p. 46.

¹¹⁷ Charles M. Doughty, *Travels in Arabia Deserta* (London, 1921), Vol. i, p. 364, and Vol. ii, pp. 460–461. On the coating of pebbles with a 'thick film of lead' and the limestone balls 'taken up for bullets by the poorer tribesmen', see *ibid.*, pp. 490, 500. On using an abundance of saltpetre for coating small pebbles in the absence of lead bullets, see Finati, *Narrative*, Vol. ii, pp. 24–25.

was the compound of choice for the bands and wires that served to bind the barrel to the stock. It was also ideal for producing components of the lock, although these were alternatively forged from iron alloys, and certain accessories, such as the powder pan cover, were easily fashioned out of copper. Silver was unnecessary but widely used for decoration. But was the Arabian Peninsula endowed with these metals? Apparently, it was. A medieval geographer wrote about the existence of gold, silver, and copper mines in the Hijāz and Najd. Although his account may be riddled with inaccuracies, geologists have discovered traces of historical mining activities in these areas as well as significant, yet-to-be-mined deposits of gold, silver, copper, zinc, iron, and lead.¹¹⁸

The Najd fault system in the Arabian-Nubian shield is rich in minerals. Between the prehistoric hominim settlements of al-Dawādmī and Jabal Idsās, located in a mountainous zone that forms part of the Najd complex of faults, archaeologists and geologists have found old silver mines, concentrations of copper and zinc, and plenty of iron ore.¹¹⁹ Evidence has surfaced from a local excavation site, Halīt, of furnaces dating back to the first millennium that were designed to extract metals from their ores.¹²⁰ Perhaps someday archaeologists will also find evidence of eighteenth-century smelting activities to propose at least a circumstantial connection between the mines of the faults of Najd and the first Saudi state. The capital of this state was not that far from al-Quway^ciyya, a town at the edge of this metal-rich region: it lay approximately 200 kilometres away, across a red sand desert. Al-Quway^ciyya's chiefs made this journey in 1169 AH (around 1755 CE), when they reportedly pledged their allegiance to a Wahhabi understanding of monotheism and 'the rules of Islam'.¹²¹

But to make tens of thousands of guns without relying on imported parts, the Emirate of Dir^ciyya would have had to possess the power to command and organise mining and smelting operations in the Najd fault system, which is doubtful, as well as the capacity to direct or requisition gun factories in allied cities. Making a gun is a time-consuming process requiring advanced metalworking and carpentry skills. If it ordinarily took 150 hours of work to craft one simple, unadorned matchlock, as one might venture to guess, then a single efficient gunsmith could perhaps manufacture 15 guns a year.¹²² At that rate, a hundred gunsmiths would be able to make no more than 1,500 guns per year; and it would take them more than 40 years to arm 67,895 Najdi men. Of course, the involvement of more smiths and carpenters would mean more specialisation and greater efficiency. Yet guns constantly broke down, requiring repair or replacement.

Did any place in Najd have the capability to do this in the second half of the eighteenth century? Two cities located in the northern district of al-Qaṣīm, Burayda and 'Unayza, earned a lasting reputation for metalwork and craftsmanship. Burayda allied itself with Dirʿiyya in 1182 AH (*circa* 1768 CE) but remained beyond Saudi control until 1189 AH (*circa* 1775 CE). 'Unayza was their common enemy. Only in 1202 AH (*circa* 1788 CE), after two decades of intermittent warfare, did the Saudi state gain dominion over it. Dirʿiyya's industries were modest in comparison to Burayda's and 'Unayza's, although they apparently grew rapidly as

¹¹⁸ D. M. Dunlop, 'Sources of gold and silver in Islam according to Al-Hamdānī (10th Century A. D.)', *Studia Islamica* 8 (1957), pp. 29–49; Gene W. Heck, 'Gold mining in Arabia and the rise of the Islamic state', *Journal of the Economic and Social History of the Orient* 42.3 (1999), pp. 364–395.

¹¹⁹ Abdullah Fahad al-Hazzaa, 'Evaluation of Iron Deposits on the Arabian Shield, Saudi Arabia', (unpublished Masters thesis, University of Arizona, 1973), pp. 16, 26; Ahmed M. S. al-Shanti, 'The Geology and Mineralization of the Ad-Dawadmi District of Saudi Arabia', (unpublished PhD thesis, University of London, 1973); Ralph J. Roberts et al., *Mineral Deposits in Western Saudi Arabia: A Preliminary Report*, Saudi Arabian Project Report no. 201 (Jeddah, 1975; revised 1977), p. 29.

¹²⁰ The Saudi Commission for Tourism and National Heritage announced preliminary findings in 2018.

¹²¹ Ibn Ghannām, *Tārīkh*, Vol. ii, p. 740.

 $^{^{122}}$ This piece of information is only a clue, but it takes twice as long, 300 to 400 hours—for Colonial Williamsburg's gunsmiths to reproduce a single rifle.

a result of the emirate's rise and expansion. *Lam^c al-Shihāb* singled out both Burayda and Dir^ciyya in its discussion of local manufacturing, mentioning that they made sabres, spearheads, and daggers, as well as horse saddles, silver jewellery, wood doors, and wool cloaks.¹²³

A gazetteer composed long after Dir'iyya's demise would report that much remained the same at Burayda: 'The chief indigenous handicrafts are those of the blacksmith, gold-smith and silversmith. Swords of good temper and workmanship are still turned out, and in former days [it] was celebrated for the manufacture of fire-arms.' The city, with a population of approximately 7,500 persons at the turn of the twentieth century, had a great bazaar where shoppers could find tinsmiths, cobblers, shoemakers, tailors, henna saleswomen, and weapons salesmen. 'Unayza, which was larger, also had armourers, wooden lock makers, seamstresses, and filigree masters. The author was not equally effusive about other Najdi cities' craftsmanship: 'Artisans are not many' in Hā'il, a northern capital whose population was half as large as Burayda's. They belong 'to the smiths' caste and their implements are few and clumsy; nevertheless, copperware, spear-heads, and horse-shoes are manufactured; wooden bowls are turned, and camel-saddles are built'.¹²⁴

However developed they were as oasis cities, Najd's leading manufacturing towns probably lacked sufficient resources, human and natural, to sustain a gun-making industry of the scale required to produce tens of thousands of guns.¹²⁵ Maybe they imported barrels and locks and concentrated on manufacturing stocks, assembly, and repair. It was common elsewhere for a whole number of specialised craftsmen to contribute to the making of guns: barrel-making, lock-making, and stock-making were separate trades, and the pieces that they made could, and did, sell separately.¹²⁶

Indirect evidence from proximate areas, literary and material, suggests that many of the matchlocks that circulated in Arabia were hybrid models. Burckhardt described Wahhabi soldiers' firearms as 'of very coarse workmanship' and reported that they procured them 'from the towns in their neighborhood'. He noticed that Bedouin preferred their gun, 'an instrument so rude as the Arab matchlock', to 'our gun', by which he meant European flintlocks, because it seemed safer and never misfired; and 'when they get a common musket have it altered into a matchlock'. (He might have added that one of the disadvantages of matchlocks—their loss of functionality in damp or rainy weather—did not trouble the inhabitants of an arid climate.) Additionally, Burckhardt beheld 'many fine Persian barrels' in the Ḥijāz. He reported that when Ottoman Egyptian troops marched from Mecca southwards to conquer the province of 'Asīr, in 1815, they took a castle in the mountains where they found a cache of 'matchlocks, old Persian barrels, particularly esteemed by the Arabs'. Thus, Burckhardt indicated that some 'Arab' guns had Persian or European components.¹²⁷

¹²³ Lam^c al-Shihāb, p. 185 (518–519).

¹²⁴ Lorimer, Gazetteer, Vol. ii, pp. 76, 327, 602.

¹²⁵ For comparative perspective, note that Birmingham had around 400 families involved in gun-making in 1707, when the industry was just at a nascent stage. By 1788, when the city was making huge numbers of guns for the East India Company and the West African slave trade, around 4,000 people were involved in it. See De Witt Bailey and Douglas A. Nie, *English Gunmakers: The Birmingham and Provincial Gun Trade in the 18th and 19th Century* (London, 1978), p. 16; Joseph McKenna, *The Gun Makers of Birmingham*, 1660–1960 (Jefferson, NC, 2021), pp. 24, 32; W. A. Richards, 'The import of firearms into West Africa in the eighteenth century', *The Journal of African History* 21.1 (1980), pp. 43–59.

¹²⁶ J. F. Hayward, *The Art of the Gunmaker: 1500–1660* (New York, 1962), Vol. i, Chapter 1; Bailey and Nie, *English Gunmakers*, p. 20.

¹²⁷ Burckhardt, Notes, Vol. i, pp. 235–237, and Vol. ii, p. 330. For an analysis of the continued use of matchlocks by Bedouin, see Benjamin Adam Saidel, 'Matchlocks, flintlocks, and saltpetre: the chronological implications for the use of matchlock muskets among Ottoman-period Bedouins in the southern Levant', *International Journal of Historical Archaeology* 4.3 (2000), pp. 191–216, at 202–203.

Doughty's testimony is also suggestive. During his extended stay with a small Bedouin clan that used to roam the volcanic terrain to the west of Madā'in Ṣāliḥ, the Mawāhīb branch of the 'Anaza confederation's Sba'a tribe, he personally examined their 'long Arabian guns', especially if they had inscriptions on them that he was asked to decipher. Hence, he discovered that their favourite matchlocks were 'old pieces of Europe.... of the centuries past'. Still in use in Arabia in 1877, they had been 'in the hands of our ancestors' and then been 'cast off' for sale in the far-away 'markets of the East'. Bedouin 'call the best *el-Lazzâry*—and I read upon them the trade-mark, in Latin letters, *Lazzarino Cominazzi*!' He also examined *el-Májar*, 'of which the nomads can give no account', and surmised that the Turks had brought the Hungarian gun to border cities; and *el-Engleysy*, an English gun that had 'good metal' but no imprint. Not all of these guns were authentic European pieces. Some barrels bearing the signature of the famous seventeenth-century Italian gunsmith were counterfeits bearing 'false stamps badly set upon them'.¹²⁸ Perhaps these were made in Persian factories that specialised in forging European models.¹²⁹

Material evidence stemming from the opposite corner of the Arabian Peninsula further confirms the impression that it was not unusual for local firearms to have foreign parts and foreign designs, which means that they are best thought of as transcultural or transregional objects. Ethnographers, museum curators, auctioneers, and aficionados have concentrated on an extremely long gun named Abū Fatīla, 'Father of the Match', that was widely used in Oman in the eighteenth and nineteenth centuries. This gun's serpentine lock mechanism resembles the widely diffused lock mechanism developed by the Ottoman Empire for its elite infantry corps' muskets (*fitilli tüfek*), which also had long barrels.¹³⁰ But technically and stylistically the Omani gun resembles even more the Indian toradar, a matchlock musket.¹³¹ Most surviving specimens have the same club butt shape that prevailed in southern India. Some have stocks made of Indian rosewood. Furthermore, several of the finest Omani guns, now housed in museums and private collections, have barrels that were probably made abroad: although their exact origin is unclear, they bear Iberian makers' stamps and Indo-Persian inlaid motifs. One intriguing example has such stamps as well as an Arabo-Islamic inscription.¹³² Muscat's craftsmen were famous for their silverwork and carpentry, and there is every reason to maintain that they manufactured gun components, repaired broken matchlocks, stocked and restocked barrels, and personalised individual instruments with artistic touches. Yet the evidence at hand indicates that this was not an insular native enterprise; it was an enterprise that flourished with the flow of trade and technology across the Persian Gulf and the Arabian Sea. And much the same can be said about the modest collection of antique Indo-Arabian firearms on display in the National Museum of Saudi Arabia: however much or little they may represent local eighteenth-century craftsmanship, they bear many signs of Najd's connection to the wider world.¹³³

¹³² Elgood, *Arms and Armour of Arabia*, pp. 44–46 and illustrations 4.2 and 4.3. Also see the 'Indo-Arab' matchlocks illustrated in Robert Elgood, *Firearms of the Islamic World in the Tareq Rajab Museum, Kuwait* (London, 1995), pp. 86, 181. Many more examples can easily be located online in auction catalogues and gun-collectors' forums.

¹³³ In December 2021, the museum displayed three matchlocks in cabinets of the weapons of the First Saudi State and the campaigns of Imam Saʿūd ibn ʿAbd al-ʿAzīz. Elsewhere in the hall, curators also placed a few pistols,

¹²⁸ Doughty, *Travels*, Vol. i, pp. 456–457.

¹²⁹ Elgood, Arms and Armour of Arabia, p. 42.

¹³⁰ Gábor Ágoston, 'Firearms and military adaptation: the Ottomans and the European military revolution, 1450–1800', *Journal of World History* 25.1 (2014), pp. 85–124 at p. 105.

¹³¹ Natasha Bennett, 'A consideration of a series of x-rays of Asian pivoted matchlock mechanisms', *Arms and Armour* 10.1 (2013), pp. 14–20. Z. Żgulski, 'Oriental and Levantine firearms', in *Pollard's History of Firearms*, (ed.) Claude Blair (New York, 1983), Chapter 15, p. 453, offers more hints than details about 'Arab influence' on South Indian matchlocks.

Najd's connections to world trade: imports by means of caravans

If it is true that tens of thousands of barrels and locks, if not fully assembled guns, entered eighteenth-century Najd through foreign trade, then the history of the rise of the first Saudi state and its official ideology, Wahhabism, will need to be revised. Historians have concentrated on endogenous factors (ranging from population growth and city alliances to distinct Wahhabi doctrines) in part because of the notion that 'Arabia Deserta' was an incredibly isolated, remote region. The impression that early Saudi policy, steered by Wahhabism, opposed trading with 'infidels' has further contributed to this historio-graphical emphasis on insularity. However, if the peninsula's interior was far more integrated into world trade than previously thought, as proposed by historians focusing on merchant-caravanner networks, then the thesis that exogenous factors played a critical role in Najd's historic political and religious developments will seem more tenable.¹³⁴

Of course, traders, raiders, nomads, pilgrims, and scholars, including Ibn 'Abd al-Wahhāb, ventured abroad; and they brought ideas, diseases, and goods back home. Najd's pre-Wahhabi chronicles include news of foreign events—natural disasters, regime changes—that demonstrate a transregional connection to several cities abroad, especially Mecca and Baṣra. But the challenge for historians of Arabia has been to locate evidence to grasp the extent and effect of frontier-crossings. The main problem is a lack of early, reliable sources: one of the earliest documentary records, an Englishman's contract with Najdi caravanners, dates from the 1770s. Actually, the clues left by Wahhabi historians of the introduction and spread of firearms from the 1720s onwards may be the best evidence in existence—although it is just suggestive, imperfect, indirect evidence—of the impact of world trade on Central Arabia in earlier times.

The plausibility of the argument that Najdis imported very many guns or gun parts and thus participated extensively in foreign trade rests on answers to several questions: Was there a supply within reach of Najd? How were these goods transported? Did Saudi policy and Wahhabi ideology really hinder exchange? How effective were imperial bans on firearm sales? What commodities did Najdi merchants import besides guns? And what did they export?

An account of the arming of the Persian Gulf littoral demonstrates a significant regional supply around the middle of the eighteenth century. The revealing document is a 1756 Dutch East Indies Company (VOC) description. It mentions multiple colonies of varying sizes whose main business was pearl-fishing and the India trade. Mischaracterised as a 'caste of Arabs called Bloesch' the Baluch of an Arabian Sea port who sailed infrequently across the Strait of Hormuz 'are a peaceful nation and carry broadswords, shields and lances and only a few matchlocks or none at all'. Another 'seafaring people' lacked 'able-bodied' men and had 'no matchlocks'. These were the exceptions. Most of the groups the Dutchman encountered were heavily armed. A community of Huwala Arabs, Sunnis from Oman who had migrated to the Persian side of the Gulf, could equip half of their '6,000 sea-going men' with guns. Because the subjects of the

long Abū Fatīla muskets, and other firearms with typical Indo-Arabian features such as rosewood stocks, idiosyncratic silver ornaments, and rounded butts with and without leather pads. Unfortunately, the reliability of the museum's historical ascriptions is unclear. An official guide confessed to me that the exhibits were meant to be suggestive, not authentic.

¹³⁴ Along these lines, see 'Abd al-'Azīz 'Abd al-Ghanī Ibrāhīm, Najdiyyun warā'a al-ļudūd: al-'Uqaylāt wa-dawruhum fī 'alāqat Najd al-'askariyya wa-l-iqtişādiyya bi-al-'Irāq wa-l-Shām wa-Miṣr (1750–1950) (London, 1991); 'Abd al-'Alīm 'Alī Abū Haykal, 'Al-Tijāra al-miṣriyya ma' Najd khilāl al-rub' al-akhīr min al-qarn 18 fī ḍaw' al-wathā'iq al-maḥaliyya', al-Mu'arrrikh al-Miṣrī 16 (1996), pp. 11–44; Hala Fattah, The Politics of Regional Trade in Iraq, Arabia, and the Gulf, 1745–1900 (New York, 1997); Mansour Alsharidah, 'Merchants without Borders: Qusman Traders in the Arabian Gulf and Indian Ocean, c. 1850-1950', (unpublished PhD thesis, University of Arkansas, 2020); and Valenti, 'State-Building'.

Imam of Muscat 'have the reputation of being bad soldiers his army consists of nothing but Caffers [*kuffār*, that is, infidels] or African slaves from Bombassa, whose inhabitants are very capable at [waging] war. Formerly the Imam had 4,000 of them, but the present one has not been able to collect more than 500 of them, all of whom are equipped with matchlocks and straight swords.'¹³⁵ In 1756, too, a British agent at Bandar Rig, Francis Wood, made a request that indicates the growing presence of British firearms. He asked Alexander Douglas, chief at Gombroon (Bandar 'Abbas), if he could spare, when supplying soldiers with arms, 'a Couple Barrels of fine Gunpowder, and a dozen of Europe padlocks, as also a thousand or fifteen hundred Flints'.¹³⁶

The trade in guns was shadowy but extensive. Imported firearms came from illicit, secretive deals. The Ottoman Empire had tried but failed to ban this trade from the sixteenth century onwards, when imperial authorities first grew concerned about the Bedouin and rebels acquiring muskets from foreign smugglers, corrupt officials, and Janissary profiteers.¹³⁷ Similarly, the Safavids tried to restrict the spread of firearms, but by the late seventeenth and early eighteenth centuries more and more nomads and peasants managed to equip themselves with guns.¹³⁸ And in the 'all-India military bazaar', there were so many competing interests and powers that attempts to curb the illicit trade were even less effective.¹³⁹ In 1770, not long after a British East India Company colonel admitted the 'very great scandal' of 'English smuggling' and revealed that 'hardly a ship' reached the country that did not sell English, Dutch, or French firearms, the British Parliament declared this trade a high crime. The consequence was that it became even more clandestine than before.¹⁴⁰ If dubious actors such as Samuel Manesty participated in this trade (he was accused of selling arms to the Wahhabis), they did not advertise it.¹⁴¹

Bans on gun trafficking partly explain the historical record's silences, yet they had little effect on the movement of firearms into the Persian Gulf and Najd because dhows and camels were outstanding gun-smuggling vehicles. Dhows had many ports and coastlines for embarking on their journeys and unloading their cargoes. Even when new imperial powers tried in earnest to patrol and capture contraband, as happened in the late

¹³⁸ Rudi Matthee, 'Firearms: history', in *Encyclopaedia Iranica*, (ed.) Ehsan Yarshater (New York, 1999), Vol. ix, pp. 619–628. On subsequent Qajar efforts to curb and control gun sales, see M. Ettehadieh, 'The arms trade in the Persian Gulf, 1880–1898', in *Proceedings of the Second European Conference of Iranian Studies, held in Bamberg*, 30th September to 4th October 1991, by the Societas Iranologica Europaea, (eds) B. Fragner et al. (Rome, 1995), pp. 176–184.

¹³⁹ For the expression, see C. A. Bayly, *Indian Society and the Making of the British Empire* (Cambridge, 1990), p. 48. ¹⁴⁰ Huw V. Bowen, 'Trading with the enemy: British private trade and the supply of arms to India, c. 1750– 1820', in *The Contractor State and Its Implications*, 1659–1815, Richard Harding and Sergio Solbes Ferri (coordinators), (Las Palmas de Gran Canaria, 2012), Chapter 2, pp. 32–53, especially 41–42, 44. David F. Harding, *Smallarms of the East India Company*, 1600–1856 (London, 1997), Vol. i, pp. 8–9, and Vol. iv, pp. 583, 590. For an impression of the staggering number of small firearms (over half a million) that the East India Company exported officially in the second half of the eighteenth century, see *ibid.*, Vol. i, p. 365.

 141 For the allegation that Manesty sold military supplies to Wahabis by 1808, see Bonacina, *Wahhabis*, p. 61, note 22.

¹³⁵ Willem Floor, The Persian Gulf. The Rise of the Gulf Arabs: The Politics of Trade on the Persian Littoral, 1747-1792 (Washington, DC, 2007), pp. 26, 27, 34, 38.

¹³⁶ Francis Wood, Resident at Bunderick, to Alexander Douglas, agent and council at Gombroon, letter of 3 May 1756, printed in *Selections from State Papers, Bombay, Regarding the East India Company's Connection with the Persian Gulf, with a Summary of Events, 1600–1800,* (ed.) J. A. Saldanha (Calcutta, 1908), LXXVI, p. 101.

¹³⁷ Uriel Heyd, Ottoman Documents on Palestine, 1552-1615: A Study of the Firman according to the Mühimme Defteri (Oxford, 1960), pp. 79-89. The Jelālī (Celali) revolts show how ineffective Ottoman restrictions were on manufacturing and smuggling guns; on the topic, see Gábor Ágoston, 'Firearms', in *Encyclopedia of the Ottoman Empire*, (eds) Gábor Ágoston and Bruce Masters (New York, 2009), p. 220. Also see Selim Hilmi Ozcan, 'Arms smuggling across Ottoman borders in the second half of the 19th century', *Journal of Balkan and Near Eastern Studies* 18.3 (2016), pp. 297–312.

nineteenth and early twentieth centuries, dhow masters succeeded by sailing at night, creating false compartments, or just hiding weapons under bales of cloth or in sacks of food. And camels could carry extremely heavy loads through deserts that no state in that era could hope to surveil and restrict effectively.¹⁴²

Moreover, camels were critical to Najd's integration into world trade. The distance from Dir^ciyya to al-Qațīf was only 250 miles; to Baṣra, 410 miles; to Damascus, 900 miles. Camel speeds varied. But it has been reliably estimated that a fully loaded caravan could journey for 15 to 30 miles a day.¹⁴³ George Sadlier's journey from al-Aḥsā[>] to Dir^ciyya took ten days, with a caravan of 600 camels. This is how long it took him to travel, with his servants and pistols, from the Persian Gulf to the 'scene of wretchedness' that he witnessed in 1819 Najd.¹⁴⁴

The fullest accounts come from late sources. The book that described Ibn 'Abd al-Wahhāb's gunmaking vision had much to say about consumption and trade. Lam^c al-Shihāb declared that many Najdis were merchants and that they travelled to the rest of the Arabian Peninsula, Syria, Egypt, and the borders of Anatolia, which the text called by Byzantium's old name, al-Rūm.¹⁴⁵ From Yemen, they brought coffee; waras, a plant that yielded a red-orange cosmetic dye and medicinal powder; and storax, a resin burned as incense. From Egypt, they brought weapons and *marjān*, which must refer not to pearls but to Red Sea corals that were in demand in India.¹⁴⁶ From Aleppo, they imported silk cloths and copper. As for iron and lead or lead shot (*rasās*), these were the main things that they imported from Anatolia, the 'land of the Rūm'. Najdis had acquired a taste for sugar and bulūj (normally called ublūj), a crystallised sugar cone, cardamom, cloves, cinnamon, turmeric, and pepper. Usually they got these treats and spices from Yemeni seaports or from al-Qatīf and Bahrain, Persian Gulf regions under Saudi rule at the time, but seldom from Oman.¹⁴⁷ Elsewhere in the book, where the author considers Najdis' dress, there are also indications of foreign trade. Commonly, women wore coarse green or black garments imported from al-Ahsā², al-Qatīf, Baḥrain, and Yemen, but many had red silk fabrics brought from Aleppo. The rich could afford colourful Indian silks that could cost as much as 20 riyāl and Persian silks that were traded for gold coins.¹⁴⁸

Missing from the long list of imports is one commodity of special importance: slaves. Very little has been written about slavery in eighteenth-century Najd, yet Wahhabi chroniclers referred to enslaved men's involvement in military encounters. Since these men were not full-time soldiers, they were probably forced to work in date-palm fields.¹⁴⁹

¹⁴² Arnold Keppel, *Gun-Running and the Indian North-West Frontier* (London, 1911), pp. 144–145, 159–161; Emrys Chew, *Arming the Periphery: The Arms Trade in the Indian Ocean During the Age of Global Empire* (Basingstoke, 2012), pp. 140–148.

¹⁴³ Lorimer, Gazetteer, Vol. ii, pp. iii-iv; Carruthers (ed.), Desert Route, pp. xxxiv-xxxv.

¹⁴⁴ Sadlier, *Diary*, pp. 36, 61, 66, 69.

¹⁴⁵ On this geographic term's meanings for Ottomans, see Cemal Kafadar, 'Introduction: a Rome of one's own: reflections on cultural geography and identity in the lands of rum', *Muqarnas* 24 (2007), pp. 7–25.

¹⁴⁶ Importing pearls to the Persian Gulf would make as much sense as taking coal to Newcastle. On the global trade in corals, see Francesca Trivellato, 'From Livorno to Goa and back: merchant networks and the coral-diamond trade in the early-eighteenth century', *Portuguese Studies* 16 (2000), pp. 193–217.

¹⁴⁷ *Lam^c* al-Shihāb, pp. 183–184.

¹⁴⁸ *Ibid.*, pp. 179–180. French authors were not impressed by Dir^ciyya's consumer revolution. Rousseau, *Mémoire*, p. 7, focused on Wahabis' *frugalité extrême*. He highlighted the consumption of grasshoppers or locusts and remarked that coffee is used only as a proper medicinal drug to cure indigestion.

¹⁴⁹ Compare to Al-Juhany, *Najd*, p. 96. He claims that slaves were 'mainly household servants' obtained in Mecca and Muscat and that they were 'always emancipated' after a period of service. These generalisations strike me as unwarranted. I am unaware of research on date-plantation slavery in eighteenth-century Najd, although Wahhabi chronicles suggest its existence. Note in particular the story of the slaves of Tharmadā' in the 1171 AH (1757 CE) battle, when they ventured at dawn into the fields. The term 'abīd appears dozens of times in every

Wahhabi histories made their presence in Huraymilā of the 1740s, before Ibn 'Abd al-Wahhāb fled the town, infamous. According to the well-known anecdote, there were in the town slaves who belonged to one of two clans (*ihda 'l-qabilatayn*) and were called al-Hamayyān, an appellation that *might* have derived from the name of Noah's cursed son, Hām.¹⁵⁰ They resented religious efforts to reform them so much that they climbed over the walls of the preacher's residence in a foiled plot to assassinate him. In the 'Battle of the Slaves', one of the earliest battles (1159 AH, *circa* 1746 CE), Dir^ciyya's raiders killed about ten Riyadhi slaves, who were left unburied for several days.¹⁵¹ Another example, recounted earlier, comes from the 1171 AH (1757 CE) Battle of Tharmadā', where the town's unfree workers (apparently date farmers) collaborated with their masters to trap the Saudi invaders in the fields.

The ethnicity of Najd's enslaved peoples is usually not specified in the Arabic texts. Typically, they are simply called by the generic term '*abīd* (slaves) and identified with their town or valley in Najd (Dir'iyya, Wādī Ḥanīfa, al-Tuwaym, Jalājil, and so on). It would be surprising if any of them were Arab, regardless of the religion or lack of religion that Wahhabis ascribed to them, given Arab-Muslim compunctions about enslaving fellow Arabs.¹⁵² When their colour is mentioned, they are described as 'black'.¹⁵³ Most likely they were East Africans who were enslaved under the presumption that they were non-Muslim and sold to middlemen on the slave markets of Mecca, Yemen, or Oman.¹⁵⁴ Illustrating their background and roles during the third Saudi emir's reign, Burckhardt referred to a 'Negro slave' named Hark, the commander of a troop during a Syrian expedition, as well as Abyssinian concubines and wet-nurses. Some Abyssinian women were captured by the Saudi army in raids.¹⁵⁵ But if Ḥuraymilā, Riyadh, and Tharmadā' acquired African men through trade, then they represent additional evidence of Najdi imports in the 1740s and 1750s.

In discussing Najd's commerce, *Lam^c al-Shihāb* drew a sharp contrast between internal and external engagements. Whereas it emphasised that Najdi merchants travelled far and wide, even speculating that individuals who had been missing for two or more decades had reached China, it did not suggest that Najdi societies had customs or institutions to host foreign merchants.¹⁵⁶ Actually, it claimed that whenever merchants from

volume of the Najdi chronicles edited by 'Abdallāh Āl Bassām, *Khizānat al-tawārīkh al-Najdiyya*. In the seventeenth century, thousands of East African slaves were put to work in Oman's date palm fields, on which see Thomas Vernet, 'Le commerce des esclaves sur la côte Swahili, 1500–1750', *Azania* 38 (2003), pp. 69–97. In a nineteenthand twentieth-century context, see Benjamin Reilly, '*Mutawalladeen* and malaria: African slavery in Arabian wadis', *Journal of Social History* 47.4 (2014), pp. 878–896; Matthew Hopper, *Slaves of One Master: Globalization and Slavery in Arabia in the Age of Empire* (New Haven, 2015), pp. 32, 34, 62–63.

¹⁵⁰ Ibn Bishr, '*Unwān al-majd fī tārīkh Najd*, (ed.) 'Abd al-Raḥmān ibn 'Abd al-Laṭīf ibn 'Abd Allāh Āl al-Shaykh (Riyadh, 1387 AH / 1967 CE), Vol. i, p. 19; oddly, the 1982 edition of Ibn Bishr's '*Unwān*, Vol. i, p. 38, referenced throughout this article omits the reference to al-Ḥ-m-yān. The etymology of Ḥ-m-yān suggested here is speculative. The first vowel could be a *dāmma* or a *fatha*; perhaps there is a missing *alif*. Ḥāmiyyūn or Ḥāmiyyān could refer to Ham's descendants, that is, Hamites. Ḥamayyān (Hmiyanes) is also the Banū Yazīd branch that migrated to North Africa but traced its Arab ancestry back to a certain Ḥamiyān ibn 'Uqba.

¹⁵¹ Ibn Ghannām, *Tārīkh*, Vol. ii, pp. 677-678.

¹⁵² Jonathan A. C. Brown, *Slavery and Islam* (London, 2020), p. 84 and note 86 on p. 364. A Najdi chronicler reported, however, that in the dire crisis of 1077 AH (*circa* 1666 CE), some parents in Mecca sold their children: 'Tārīkh al-Fākhirī', in *Khizānat al-tawārīkh*, (ed.) Āl Bassām, Vol. iii, p. 75.

¹⁵³ 'Tārīkh Ibn 'Īsā', Vol. ii, p. 87 (under year 1211 AH /1796 CE). In his review of Sa'ūd ibn 'Abd al-'Azīz's reign, Ibn Bishr, '*Unwān*, Vol. i, p. 348, describes the emir's *mamluks* as black.

¹⁵⁴ On this trade around 1750, see Vernet, 'Le commerce des esclaves sur la côte Swahili, 1500–1750'.

¹⁵⁵ Burckhardt, *Notes*, Vol. ii, pp. 123, 131, 206. In his list of treasures plundered from Karbala, Mengin, *Histoire*, Vol. ii, p. 523, also refers to 'esclaves noires et abyssiniennes'.

¹⁵⁶ On Najdi traders' supposed ventures to China, see Lam^c al-Shihāb, p. 184 (515).

neighbouring towns or countries entered Dir^ciyya to buy or sell things, the community was so rude, spiteful, and deceitful that Muḥammad ibn Sa^cūd had to order it to put out its intrigues and strife.¹⁵⁷ Telling, too, is the observation that there were no caravanserais ($kh\bar{a}n\bar{a}t$) for the merchants of Najd. Nor was there a covered bazar ($s\bar{u}q$ musaqqaf), as in Persia. Instead, local merchants used their homes for business, for the storage and sale of merchandise, while caravans passing through town had to display their wares on the road, in a roofless market.¹⁵⁸ Crucially, there was no institution comparable to the medieval Mediterranean *funduq* or the Silk Road $kh\bar{a}n$ to lodge strangers and store their merchandise, thus facilitating commercial sojourns.¹⁵⁹ Openness to foreign merchandise was not matched by openness to foreign merchants.

Some of Lam^c al-Shihāb's generalisations may seem faulty. The author's claim about Najd's lack of covered markets might, for one, be qualified. Clearly, he found the vaulted ceilings of the grand markets of Tabriz, Isfahan, and Shiraz incomparable. But 'Unayza's open market square was eventually given a crown of mud-brick arches.¹⁶⁰ What is more significant is Lam^c al-Shihāb's point about the absence of inns to serve caravan merchants and, by extension, pilgrims. There were caravanserais-or ruins of caravanserais-and forts that afforded lodging along Darb al-Zubayda, the famous hajj route from Kufa to Mecca. But they fell into disrepair and disuse following the Mongol invasions and the collapse of the 'Abbasid caliphate.¹⁶¹ Even so, tents were an alternative, as were palaces for distinguished travellers. Certainly, many strangers found accommodations in or near Dir^ciyya during its artificial post-expansion boom, when the emir's palace was full of guests and seasonal fairs drew Yemeni, Omani, and Egyptian traders.¹⁶² Moreover, even if they lacked inns and Persianesque markets, it is conceivable that the Najdi cities that would earn a reputation for economic liberalism and ecumenical hospitality in the nineteenth century had developed a welcoming ethos earlier.¹⁶³

Nevertheless, the contrast that *Lam^c* al-Shihāb drew is insightful because it helps to explain how before state expansion Najd was integrated into world trade but disconnected from cross-cultural exchange. As often as Najdi merchants crossed regional frontiers to reach caravan destinations abroad, beginning with al-Zubayr in the Mesopotamian Marshes, foreigners rarely ventured in.¹⁶⁴ Persian Gulf merchants who thrived in the business of dhows had no compelling reason to branch out into the business of caravans. For their trade with the interior, they had recourse to camel drivers who were typically from Najd or from a Najdi diaspora, the Banū Khālid confederation, which had ties to its

¹⁶⁰ News reports of the reconstruction of the razed market as a tourist replica suggest that the original structure was built in the 1810s and named $s\bar{u}q$ *al-musawkaf* (*sic*, with a $k\bar{a}f$ rather than a $q\bar{a}f$) due to its roofed section.

¹⁵⁷ *Lam^c* al-*Shihāb*, p. 46 (99). Also cited by Cook, 'Expansion', p. 699, note 217, as a qualification to the impression that neither Saudi policy nor Wahhabi doctrine seemed designed to serve 'the needs of commerce' (pp. 678–679).

¹⁵⁸ Lam^c al-Shihāb, p. 184 (513).

¹⁵⁹ On institutions and spaces to facilitate and delimit commercial contact with strangers, see Leor Halevi, 'Religion and cross-cultural trade: a framework for interdisciplinary inquiry', in *Religion and Trade: Cross-Cultural Exchanges in World History*, 1000–1900, (eds) Francesca Trivellato, Leor Halevi and Cátia Antunes (Oxford, 2014), Chapter 1, p. 51; Olivia Remie Constable, *Housing the Stranger in the Mediterranean World: Lodging, Trade, and Travel in Late Antiquity and the Middle Ages* (Cambridge, 2003).

¹⁶¹ Bernard O'Kane, 'Residential architecture of the Darb Zubayda', in *Beiträge zur islamischen Kunst und Archäologie, Band 4*, (ed.) Julia Gonnella (Wiesbaden, 2014), pp. 208–209.

¹⁶² Alexei Vassiliev, The History of Saudi Arabia (London, 1998), pp. 119, 130-131.

¹⁶³ Madawi Al-Rasheed, *Politics in an Arabian Oasis: The Rashidis of Saudi Arabia* (London, 1991), pp. 57, 100–101; Sebastian Maisel, 'The transformation of 'Unayza: where is the "Paris of Najd" today?', *Arabian Humanities* 2 (2013): https://doi.org/10.4000/cy.2587.

¹⁶⁴ On al-Zubayr's importance, see Fattah, Politics of Regional Trade, p. 71.

ancestral homeland.¹⁶⁵ In peaceful times, the *ḥajj* was an ideal opportunity for commercial and social interaction. But Najd had violent, unfrequented tracks. Persian and Indian pilgrims normally took alternative paths to Mecca following the Ottoman closures of the trans-Arabian routes. The Ottoman proscriptions were unenforceable, but pilgrims from Baṣra to al-Aḥsā⁵ who tried to travel overland did so without the benefit of imperial protection.¹⁶⁶ These crossings were dangerous and irregular. When chroniclers remarked on them, they emphasised troubles and disasters. In 1689, for example, raiders from the al-Ṣafīr and al-Fuḍūl tribes wandering near the village of Tanūma, in al-Qaṣīm, fell upon the caravan of *ḥajjis* returning to Iraq. A 1730 caravan from al-Aḥsā⁵ fared far worse.¹⁶⁷ As for European travellers, they never strayed very far from the peninsula's coasts. Even the most intrepid explorers were wary of entering. They learned what they could through reports—and on this basis represented or misrepresented Najdi commerce.

Accordingly, in the 1760s Niebuhr found signs that led him to conclude that Najdis engaged in brisk commerce with each other and with neighbouring lands. Although he made no attempt to penetrate Najd himself, he thought it not 'impossible for a European voyager to travel with security to Arabia's interior'.¹⁶⁸ Burckhardt similarly held that 'a single merchant might traverse the Desert of Arabia with perfect safety', attributing the end of 'pilfering and plundering' to 'Wahaby' law and order. He commented, however, on a historical change in religious policies to commerce with strangers. When the 'Wahaby creed was first instituted', communication with 'other nations' was forbidden. The Saudi emir needed 'most frequently to punish' the offence of 'intercourse of his Arabs with heretics'. Najdis were 'much in the habit' of visiting cities abroad, 'so that at last Saoud [ibn 'Abd al-'Azīz] found it necessary to relax his severity'. Allegedly, he confiscated exports to 'any heretic country' but respected imports. He 'always protected trade in his dominions', provided it was not 'carried on with... heretical Musélmans', and made the contention that the Prophet 'never forbade merchants to derive from their capitals as much profit' as possible.¹⁶⁹ Burckhardt's impressions of the Saudi turn to capitalism might be somewhat accurate-or not.¹⁷⁰ They do, however,

¹⁶⁵ The caravan and dhow businesses were interdependent but distinct, and trading networks tended to specialise in one or the other shipping mode. In northern Najd and the Persian Gulf's northwestern coast, the Banū 'Uqayl drove camel trains and the 'Utūb sailed on trading vessels. This is not to say that 'Uqayli merchants could not board ships in Zubāra or that 'Utbi merchants could not ride camels to 'Unayza. (In Sadlier, *Diary*, p. 72, he would mention the presence of merchants of the 'Ootoobee tribe' in Anizeh.) On these networks, see Abu Hakima, *History of Eastern Arabia*, *1750-1800: The Rise and Development of Bahrain and Kuwait* (Beirut, Lebanon, 1965), Chapter 6; Alsharidah, 'Merchants without Borders', pp. 25–26.

¹⁶⁶ Suraiya Faroqhi, *Pilgrims and Sultans: The Hajj under the Ottomans* 1517-1683 (London, 1994), pp. 135-137. For a sense of the effects of the Ottoman-Safavid rivalry on the *hajj*, also see Maryam Ala Amjadi, 'Safavid-Ottoman encounters in Persian travel poetry and prose (1505-1741)', *Journal of the Ottoman and Turkish Studies Association* 7.2 (2020), pp. 115-131, at 123 and 128. On the routes that South Asian pilgrims took during the eight-eenth century, see Rishad Islam Choudhury, 'The Hajj from India in an Age of Imperial Transitions, 1707-1820', (unpublished PhD thesis, Cornell University, 2015).

¹⁶⁷ On these and related events, see Āl Bassām (ed.), *Khizānat al-tawārīkh*, Vol. i, pp. 143, 148–149; Vol. ii, pp. 65 and 68; Vol. iii, pp. 19, 38, 40–41, 89–90.

¹⁶⁸ Niebuhr, Voyage en Arabie, Vol. ii, pp. 138-139; idem, Beschreibung von Arabien, p. 345.

¹⁶⁹ Burckhardt, Notes, Vol. ii, pp. 140-141, 149-150.

¹⁷⁰ In Vassiliev, *History*, pp. 130 and 137–138, he mainly relied on Burckhardt to characterise Saudi commercial policy in the 1810s as favourable to domestic, but 'destructive' for foreign, trade. Security measures encouraged intra-Arabian trade, he explained, while Wahhabi 'fanaticism' suppressed commerce with polytheists and inhibited the *hajj* from the Ottoman Empire. At the same time, Vassiliev presented confounding evidence suggesting instead a policy that encouraged importation and the security of pilgrims' and merchants' property. Fattah, *Politics of Regional Trade*, pp. 49–51 and 58–61, describes the shift *circa* 1800 from a very different perspective

confirm the view that Najd under Saudi rule was not a closed economy: it was one that kept infidels out but let foreign goods in. 171

The influence of the 'Wahaby creed' on Najdi trade is debatable and unclear, but it is worth clarifying that Ibn 'Abd al-Wahhāb's rulings accommodated foreign trade better than Burkchardt and many others have thought. A biographer has recently claimed that Ibn 'Abd al-Wahhāb justified 'aggressive' commercial boycotts of unbelievers' settlements. He argued that the theologian 'had a prejudice against commercial motives and readily dismissed the trader's argument for dealing with polytheists'. The basis for these claims seems inadequate.¹⁷² Ibn 'Abd al-Wahhāb's son Sulaymān (d. 1818) and his successors were the ones who developed and elaborated rulings to restrict believers from trading with infidels abroad.¹⁷³ When Ibn 'Abd al-Wahhāb commented on legal doctrines about non-Muslim merchants reaching the House of Islam to trade, he extended to them conventional protections. He argued that Muslims must not object to polytheistic merchants from enemy countries because they arrive at Islamic harbours trusting in their safe conduct $(am\bar{a}n)$.¹⁷⁴ He did not specify how to relate this concession to maritime trade to the realities of his state, but he clearly pictured the arrival of foreign merchants at a Muslim port. What he would have made of non-Muslims visiting Dir^ciyya is unknown. He seems not to have given much thought to the 'problem' of true Muslims trading with the Najdi cities and tribes that he had accused of disbelief. Aside from the fact that oasis cities depended on trade for all sorts of things, it would have been very difficult for the theologian to justify—on the basis of the shari a—a ban on buying meat and milk from all of the Bedouin whose beliefs and ways of practising Islam he despised. In the absence of evidence indicating otherwise, there is simply no reason to assume that he disagreed with jurists who sanctioned Muslim commerce with non-Muslim enemies, even in the context of jihad, provided these were usury-free exchanges in lawful commodities.

Burckhardt gave an account of the relaxed Wahhabism that characterised Saudi commercial policy after the incorporation of the Hijāz. Similarly, *Lam^c al-Shihāb*'s contemporary description of Najd's international trade and luxury consumption reflected early nineteenth-century conditions. By this time the Saudi emirate had conquered ports from the Red Sea to the Persian Gulf that granted easy access to a huge variety and

as a transition from 'free trade traditions' towards the imposition of statist controls on commerce that involved a Saudi monopoly on protection dues.

¹⁷¹ Ibn Bishr, 'Unwān, Vol. i, p. 267, for what it is worth, also remembered the reign of the second Saudi emir (r. 1765–1803) as one of 'tranquil security' (*āmina muțma'inna*). Then, individual merchants and shepherds could travel freely with their goods or animals anywhere on Saudi territory, 'fearing nobody but God'. Ironically, Najd's shepherds and farmers felt safe from thieves thanks to Saudi protection in the moment of history when the British began worrying about Wahhabi piracy.

¹⁷² Crawford, *Ibn 'Abd al-Wahhab*, p. 68. The sole citation given there is to a missive that Ibn 'Abd al-Wahhāb sent to Aḥmad ibn 'Abd al-Karīm of al-Aḥsā. At the end of the letter, which stemmed from a contemporary Ḥanbali debate about the justifiability of charges of infidelity, the theologian shows disdain for those who would risk their salvation for half a toman and appreciation for those who had migrated to Dir^ciyya without worldly possessions. Included in Ibn Ghannām's *Tārīkh*, Vol. i, pp. 431-440, the letter does not deal explicitly with trade or boycotts. An Islamic discourse on boycotting enemy infidels emerged later in history. On this development, see Leor Halevi, 'The consumer jihad: boycott fatwas and nonviolent resistance on the world wide web', *International Journal of Middle East Studies* 44 (2012), pp. 45-70, at 49-50.

¹⁷³ On this doctrinal turn, see David Commins, *The Wahhabi Mission and Saudi Arabia* (London, 2006), pp. 33–35; Elizabeth Sirriyeh, 'Wahhābīs, unbelievers and the problem of exclusivism', *British Society for Middle Eastern Studies Bulletin* 16.2 (1989), pp. 123–132; Tarik K. Firro, 'The political context of early Wahhabi discourse of Takfir', *Middle Eastern Studies* 49.5 (2013), pp. 770–789, at 781–782.

¹⁷⁴ Muḥammad ibn 'Abd al-Wahhāb, 'Mukhtaṣar al-Insāf wa-Sharḥ al-kabīr', (eds) 'Abd al-'Azīz ibn Zayd al-Rūmī and Ṣāliḥ ibn Muḥammad al-Ḥasan, in *Muʾallafāt al-Shaykh al-Imām*, (general eds) 'Abd al-'Azīz ibn Zayd al-Rūmī, Muḥammad Biltājī and Sayyid Ḥijāb (Riyadh, 1977), Vol. ii, part 1, p. 395; Natana J. Delong-Bas, *Wahhabi Islam: From Revival and Reform to Global Jihad* (Oxford, 2004), pp. 82, 203–204.

volume of foreign goods. Najd's commercial horizons before 1795, when the Saudi emirate had yet to gain firm control of al-Aḥsā' and its harbours, were narrower.¹⁷⁵

Nevertheless, an imperial British source serves to confirm that the Emirate of Dir^ciyya had established commercial links to the Persian Gulf before these conquests. This source is the 'Report on the Commerce of Arabia and Persia', which two well-known political agents in the region, Samuel Manesty and Harford Jones, completed in Basra in 1790. It mentions that the commerce of the pearl-fishing ports of Catiffe (al-Qatīf) and Iebarra (al-Zubāra), which were still under the possession of the Benechalid (Banū Khālid) and Beneattaba (Banū 'Utūb), 'has been in all Times chiefly confined to the Importation of the Coffee, and of such Indian and European mercantile Articles, as has been found necessary for their own consumption and for the consumption of the Arab Tribes of Whahab and Benechalid, who are People little acquainted with any of the Luxuries of Life and who inhabit the extensive Deserts...'. The report proceeds to list a series of commodities that 'must ever prove in demand' at these ports and in the country inhabited by the Wahhabi clans: cloth-making materials and garments such as Surat blue (indigo dye), Cambay chadors, Gujarat piece goods, and Bengal soosies (mixed cotton and silk fabrics); coffee, sugar, pepper and other spices, ghee, oil, rice; and a number of metals. A portion of the goods that the ports of al-Qatīf and al-Zubāra did not keep for local consumption were 'conveyed, by Land by means of Camels at a moderate expense, and without any considerable Risk to Draeeah [Dir^ciyya], the usual residence of the Shaik of the Arabs of the Tribe of Whahab', and then distributed to districts under his jurisdiction.¹⁷⁶

Manesty and Jones's report does not specify what Dir'iyya imported, but confirms its integration, 'by means of camels', with the Persian Gulf trade. Additionally, it shows that many of the foreign commodities listed by Lam^c al-Shihāb were already in circulation three decades earlier. Among other things, it notes that Europeans imported to the region tin, iron, lead, and steel, essential metals for manufacturing barrels and locks, as well as copper-zinc-nickel pieces known as tutenag or toothenague, which the Dutch brought from China.¹⁷⁷ It refers to the import of firearms, too, disclosing that French vessels had been conveying to Muscat 'small Cannon, Balls and some coarse fire Arms'. Eager to inform the East India Company of opportunities for profit, the report emphasises that merchants from Bushire had dispatched to Muscat 'Factors in Charge of Adventures' to probe demand for woollen fabrics from Bengal, chintz from the eastern Indian port of Masulipatnam, and 'European Fire Arms'. This may be taken as evidence of European interest in selling guns in the Persian Gulf, but it is important to recognise that the French and British were attempting to enter an established market led by a regional power. The report concedes this fact, highlighting the 'manufactures of Glass, Sword Blades, spearheads and [g]un barrels' carried out at Shiraz, the capital of Iran's Zand dynasty (1751-1794), 'since it is from thence, that the different places in the Gulph are supplied with those Articles'.¹⁷⁸

Najdi connections to world trade are also apparent in a fascinating document that survived only in its English translation: a 1778 contract between an East India Company officer, James Capper, and a group of caravanners organised by a certain 'Arabian Sheick', Haggi Suliman Eben Adeyeh. In exchange for hundreds of Spanish dollars to be paid in stages, Ibn 'Ațiyya and nine travelling partners (*refeeks*), bearing both firearms and the

¹⁷⁵ Abu Hakima, *History*, pp. 144, 178.

¹⁷⁶ Samuel Manesty and Harford Jones, 'Report on the commerce of Arabia and Persia' (Başra, 15 August 1790), in Saldanha (ed.), *Selections*, Appendix F, pp. 404–434, at 405 and 408.

¹⁷⁷ On the rising volume of metal imports (essential for the armaments industry) in the late eighteenth century, see Michael Talbot, *British-Ottoman Relations*, 1661–1807: *Commerce and Diplomatic Practice in Eighteenth-Century Istanbul* (Woodbridge, Suffolk, UK, 2017), pp. 84–85.

¹⁷⁸ Manesty and Jones, 'Report', pp. 406, 425–426.

protective ensigns of their tribes, vowed to defend the camel train during its passage through the Syrian Desert, from Aleppo to Baṣra. The caravan was a small one. It carried the Englishman and his baggage as well as the goods of a 'Jew merchant', Khwaja Rubens, laden on 30 camels. Its main force consisted of 'seventy guards of the tribes of Arabs Nigadi, and Agalli, and Benni Khaled, who are all to be armed with muskets'.¹⁷⁹ This clause proves the involvement of Najdi (Nigadi) escorts. But the mention of Agallis—or, as they are known today, 'Uqaylis—is of special interest. These caravanners hailed from the settlements of al-Qaṣīm, especially Burayda and 'Unayza, whose emirs took opposite sides in the Saudi war for expansion. Clearly, by the 1770s gun-toting men who were allied either with or against Dir'iyya were operating as far as Aleppo.¹⁸⁰

Historians of the ^cUqaylis have described them as networked merchants that crossed frontiers and 'incorporated' Najd 'into the global economy'.¹⁸¹ They travelled far and wide. Documents from the last quarter of the eighteenth century shed light on some of their importing and exporting activities; they brought from Egypt wheat, rice, cloth, copperware, and, it appears, some muskets.¹⁸² However, what is evident from the contract of 1778 is their involvement in the Syrian caravan trade as both camel-renters and musket-bearing guards. Offering the English colonel 19 camels for his and his company's use and promising to 'buy ourselves thirteen rotolas of gunpowder, and twenty-six rotolas of balls', they provided transportation and protection in exchange for cash.¹⁸³

Eighteenth-century Najd was nobody's model of *doux commerce*.¹⁸⁴ But its reputation for tribal raids belies the flow of trade through the region. Annalists registered extraordinary events, not the mundane. Accordingly, they left for posterity stories about the misfortunes that pilgrims' caravans encountered. Between 1715 and 1730 CE, commanders of the *hajj* from al-Ahsā' led three caravans, with an armed escort, across Najd. The last one suffered more than the usual pillaging, a notorious end: Mutayr tribesmen waylaid it, killing several notables and plundering many goods.¹⁸⁵ Wahhabi historians celebrated heroic raids, not the Enlightenment's ideals of commerce. They remembered a night-time excursion into al-Ahsā' in the early 1760s that yielded riding animals and weapons of an unspecified type. And they recalled two ambitious raids in the 1780s against large trading caravans from al-Ahsā' and Baṣra. The first one, carrying sundry goods, had a large escort

¹⁷⁹ James Capper, Observations on the Passage to India, Through Egypt. Also by Vienna Through Constantinople to Aleppo, and from Thence by Bagdad and Directly Across the Great Desert to Bassora. With Occasional Remarks on the Adjacent Countries, an Account of the Different Stages, and Sketches of the Several Routes on Four Copper Plates, 3rd edn (London, 1785), pp. 179–184.

¹⁸⁰ It is not known if they were from Burayda, a Saudi ally in the late 1770s, or from 'Unayza, still a Saudi enemy. One of the settlements incorporated into 'Unayza was called al-'Uqayliyya but many 'Uqayliyāt would call Burayda home. See Altorki and Cole, *Arabian Oasis City*, p. 15, and Alsharidah, 'Merchants without Borders', pp. 25–26.

¹⁸¹ Valenti, 'State-Building', p. ix. On pp. 90–91, Valenti briefly analyses the 1778 contract but without mentioning guns. Elsewhere, he discusses, with hesitation, their military services for hire. Compare to Ibrāhīm, *Najdiyyun*, which places greater emphasis on the network's gun-trafficking and mercenary activities.

¹⁸² Abū Haykal, 'Tijāra'. Focusing on their trades in the next century, Alsharidah, 'Merchants without Borders' lists more commodities.

¹⁸³ Capper, Observations, p. 180.

¹⁸⁴ Badia i Leblich used the Enlightenment concept in his lament of the effect of Wahhabism on the international pilgrimage trade. He argued that 'necessity' would make the Wahhabi state relax its 'intolerance toward other nations' while 'commerce with strangers' would correct the unnatural 'vice' of extreme austerity. El-Abbassi, *Voyages*, Vol. ii, p. 459.

¹⁸⁵ Ibn Bishr, 'Al-Sawābiq', in 'Unwān, Vol. ii, pp. 372–373; Abu Hakima, *History*, pp. 128–129. This episode may be fruitfully compared to Bedouin attacks on pilgrimage caravans through the Syrian Desert. Due partly to the spread of firearms there, these attacks grew alarmingly frequent in the eighteenth century, culminating in the bold and deadly raids of 1732 and 1757. On this trend, see Karl K. Barbir, *Ottoman Rule in Damascus*, *1708–1758* (Princeton, NJ, 1980), pp. 105–106, 176–177, 200–201.

of 300 armed men. It was ambushed by Saudi soldiers right after its thirsty riders crossed a natural border, the Dahnā³ desert, to enter Najd; and around 70 enemies of 'the Muslims' died, according to Ibn Ghannām. The second caravan, carrying cloth and clothes for the Bedouin of Mount Shammar, met a similar fate in northern Najd.¹⁸⁶ Such stories confirm what is well known: that the warriors of the Emirate of Dir^ciyya accumulated external goods by violent means. They also suggest something else, which Wahhabi historians found unremarkable: the persistence of caravan traffic despite the risks of the time. Imports flowed inland through chronicled raids and unchronicled trades.

There is something close to a smoking gun in this review of the evidence. It is not the contract of 1778 because by then the Saudi emirate had assumed power over much of Najd. Earlier evidence is required to support more firmly the thesis that imported guns had a transformative effect on Najdi politics and war. This evidence need not go back to the putative founding of the state around 1744. Dir^ciyya then was really just one of many oasis chiefdoms. The process of forming a larger state took a long while. (The two decades that followed Ibn ^cAbd al-Wahhāb's migration saw very modest gains that deserve as much attention as historians want to give Wahhabi origin stories.) Only in the second half of the 1760s and first half of the 1770s, with a few key conquests, did Saudi territory expand significantly. This is why the 1756 VOC description of the arming of the Persian Gulf region is a crucial piece of evidence: it shows where Najdi caravanners with links to Dir^ciyya and rival cities could easily have acquired matchlock guns. All they needed—if they lacked the faith to raid for firearms with sabres and darts—were some Najdi products to barter or trade.

Najd's exports: dates, camels, sheep, and horses

In the article where he suggested that Ibn 'Abd al-Wahhāb's religious charisma moved Dir'iyya's zealous warriors to fight until they succeeded in forming an Islamic state, Michael Cook also considered the theoretical proposition that external resources might have influenced the process. He doubted it, as we have seen, since Najd produced 'no cashcrop' for eighteenth-century Europe's expanding markets. Because the resources under discussion (guns or gun parts) did not necessarily come from Dutch, French, British, or other European factories, our focus need not be on Najdi-European trade. Perhaps the matchlocks came from factories of the Ottoman Empire, South Asia, Iran under the Zand dynasty, or the Sultanate of Oman. Nevertheless, the indispensable question remains: what, besides ostrich feathers, did Najdis sell to get the cash to buy firearms?

Most of *Lam^c* al-Shihāb's suggestions, based on secondhand accounts, do little to solve this puzzle. One informant told the author: 'I witnessed Najdi merchants, among whom there were people from al-Qaṣīm, selling dates in Damascus, Syria, and discovered that they were importing them from their country.'¹⁸⁷ Burayda and 'Unayza were the principal cities of the district of al-Qaṣīm, and it is not difficult to believe that there was demand for this region's dates abroad. In his discussion on Najd's commerce, Mengin also mentions date exports, but to Yemen, which provided coffee in exchange.¹⁸⁸

Much is known today about the global market for dates in the age of steam, yet East India Company records confirm that this was a significant and widely traded commodity earlier. Even European merchants participated in this trade, memorably. In 1756, the

¹⁸⁶ Ibn Ghannām, Tārīkh, Vol. ii, pp. 762–763, 852–853, 859; Ibn Bishr, ⁽Unwān, Vol. i, pp. 90, 155, 157. The dates of these raids are 1176, 1199, and 1200 AH.

¹⁸⁷ Lam^c al-Shihāb, p. 183 (512).

¹⁸⁸ Mengin, *Histoire*, Vol. ii, p. 174. In addition, Mengin mentions exports of ostrich feathers, sheep, wool, camels, and horses.

Dutch Factory at Gombroon was in the habit of purchasing 'plenty of dates, Fish, and Bread' to keep more than a hundred 'coffree' (*kāfirī* or pagan) slaves of African origin allegedly 'contented under their Bondage'.¹⁸⁹ Three years later, during the Seven Years War, French gunships attacked the English Company's Factory at Gombroon, 'took away a few liquors we had', and proceeded freely to unload from their ship *le Mamoody* 'cargoes consisting of Dates', in exchange for old copper.¹⁹⁰ In 1763, East India Company representatives threatened 'violent measures' against a Bedouin tribe that had taken possession of 'the dates at Dawasha'.¹⁹¹ Manesty and Jones's 1790 report repeatedly mentions dates. Baṣra's 'vicinity' alone annually produced crops amounting to a million Bombay rupees; these were despatched by vessel to Persian Gulf harbours and from there exported to Indian Ocean ports.¹⁹² Najdi oases settlements with a surplus of this crop conveyed it by camelback to markets at the edge of the desert and thus participated in international trade.¹⁹³

In addition to dates, *Lam^c al-Shihāb* states that Najd exported many camels to Aleppo.¹⁹⁴ Aleppo was one of Western Asia's great emporiums. There one could indeed buy Arabian camels, as well as Persian, Indian, and Chinese goods brought in by caravans through the overland desert routes.¹⁹⁵ Forced to serve in both commercial and military enterprises, camels played an essential role as draft animals and war mounts in Anatolia and the Ottoman Empire's Arab provinces; they were indispensable in environments that were not traversable by wheeled carts or wagons.¹⁹⁶ Economic growth in the Ottoman Empire in the first three quarters of the eighteenth century, which was accompanied by the expansion of internal and external trade, meant extra demand for camels to transport goods to both inland towns and seaports.¹⁹⁷ And a port city that was integral to this commerce, Basra, was a key destination for Najdi caravans.¹⁹⁸

¹⁹⁵ Jane Hathaway, with contributions by Karl K. Barbir, *The Arab Lands Under Ottoman Rule*, 1516–1800 (London, 2013), pp. 159, 185–186. This book holds that the 'Anaza confederation and the Banū 'Uqayl were the dominant actors in the overland caravan trade through the Syrian Desert. It represents the Wahhabis as raiders.

¹⁹⁶ Suraiya Faroqhi, 'Camels, wagons, and the Ottoman state in the sixteenth and seventeenth centuries', *International Journal of Middle East Studies* 14.4 (1982), pp. 523–539; Onur Inal, 'One-humped history: the camel as historical actor in the late Ottoman Empire', *International Journal of Middle East Studies* 53.1 (2021), pp. 57–72; William G. Clarence-Smith, 'Horses, mules and other animals as a factor in Ottoman military performance, 1683–1918', Paper presented at 'War Horses of the World' conference, SOAS University of London, 3 May 2014, https://www.soas.ac.uk/history/conferences/war-horses-conference-2014/file94820.pdf (last accessed 28 April 2021); Gábor Ágoston, 'Ottoman warfare in Europe, 1453–1826', in *European Warfare, 1453–1815*, (ed.) Jeremy Black (New York, 1999), p. 142. It is impossible to estimate how many dromedaries the Ottoman Empire used around the middle of the eighteenth century. Ágoston writes that the state hired 9,500 to 14,000 camels annually between 1769 and 1773. A nineteenth-century survey estimated that 'about 100,000' camels were 'continually employed in Turkey' for the purposes of trade; Edward H. Michelsen, *The Ottoman Empire and Its Resources; with Statistical Tables of the Army, Navy, Trade, Etc.; Preceded by an Historical Sketch of the Events in Connection with the Foreign and Domestic Relations of the Country, During the Last Twenty Years, 2nd edn (London, 1854)*, p. 195. Most of the sources cited here do not distinguish between dromedaries, Bactrian, and hybrid camels.

¹⁹⁷ Mehmet Genç, 'L'Économie ottomane et la guerre au XVIII^e siècle', *Turcica* 27 (1995), pp. 177-196; and Şevket Pamuk, 'The Ottoman Empire in the eighteenth century', *Itinerario* 24 (2000), pp. 104-116, at 111-112.

¹⁹⁸ On the caravan trade with Aleppo, see Thabit A. J. Abdullah, *Merchants, Mamluks, and Murder: The Political Economy of Trade in Eighteenth-Century* Basra (Albany, NY, 2001), pp. 77–81. On the growing presence of Najdis (immigrants and merchants) in Başra, see pp. 26, 35, 69, 99. To the evidence presented by Abdullah, one may

¹⁸⁹ Wood's 1756 letter to Douglas, in Saldanha (ed.), *Selections*, p. 99.

¹⁹⁰ Gombroon Report to Governor at Bombay, 22 October 1759, in Saldanha (ed.), Selections, p. 132.

¹⁹¹ Basrah Factory Diary, October 1763, in Saldanha (ed.), *Selections*, p. 169.

¹⁹² Manesty and Jones, 'Report', pp. 407, 411.

¹⁹³ W. Floor, Persian Gulf: Links with the Hinterland, Bushehr, Borazjan, Kazerun, Banu Ka'b and Bandar Abbas (Washington, DC, 2011).

¹⁹⁴ Lam^c al-Shihāb, p. 183 (511).

In the middle of the eighteenth century, British travellers gave some indications of this trade's value and volume. Plaisted, the East India Company surveyor, set off from Başra for Aleppo with a caravan of 2,000 'light camels', young dromedaries that belonged to 'the sheik of Lasser, of Ahsa, a town in Arabia'. More and more joined the caravan en route, making it swell to 'about five thousand camels'. Four hundred bore heavy loads; the rest were 'designed for sale'. He bought two camels for 30 piasters each. John Carmichael, an aggrieved, decommissioned gunner who was blocked from boarding East India Company ships, travelled through the desert in the opposite direction. His caravan had 'twelve hundred camels, six hundred of which were laden with merchandise, chiefly belonging to the [thirty-three] Christians and [seven] Jews, amounting in value to near three hundred thousand pounds sterling'. He estimated that camels acquired in Baṣra 'for forty rupees per head' would sell for twice as much in Aleppo.¹⁹⁹ All of this demand meant a commercial opportunity for Najd's camel breeders.

Known for their long tails, great height, black coat, and white heads, Najdi sheep were clearly raised for export. If there were hundreds of thousands of them in the region, as Saudi chronicles imply in their accounts of livestock raids and war spoils, then they provided more meat, wool, and milk products such as ghee than necessary for local consumption. Unfortunately, despite its economic significance, the trade of Central Arabia's nomads left little trace in eighteenth-century historical records.²⁰⁰ European histories indicate that their distinctive breed of sheep reached Damascus slaughterhouses and that their wool was sold in Mecca.²⁰¹ But it is hard to work out the cost of a single sheep in ordinary times or to get a sense of the volume of this trade, although it was extensive and subject to taxes.²⁰² A set of exceptional documents reveals that during the 1790s the 'Uqayli merchant network was exporting 6,500 to 8,500 rotls of wool annually to Egypt. That was a relatively small amount, however, and not nearly as impressive as the 150 to 260 tons of dates, 1,950 to 2,600 camels, and 180 to 295 horses that they transported annually to the same country.²⁰³

Arabians were Najd's most valuable and best documented commodity. Immediately after reporting on the import of iron and lead, Lam^c al-Shihāb states: 'And people of Najd might set out with noble horses (*khayl 'itāq*) to the borders of Mulk al-Rūm [Anatolia] for trading, because their horses are coveted (*marghūb*) there among the "Romans" due to their tremendous running speed.' The geographic and ethnic references given are imprecise. The word translated above as 'borders' (*aṭrāf*) might have referred either to the Anatolian-Syrian frontier or to the farthest fringes of the Ottoman realm—in other words, the Balkans. And by 'the Romans' (*al-Arwām*), the author might have meant Greek Orthodox Christians and others categorised as members of an officially constructed

add the fact that Najdi annalists recorded Baṣra's political upheavals and natural disasters. They did so as early as 1078 AH (1668 CE) but with increasing regularity from 1102 AH (1689 CE) onwards. This is evidence of communications. The focus on crises may reflect a regional interest in events that disrupted normal commercial exchange. See Āl Bassām (ed.), *Khizānat al-tawārīkh*, Vol. iii, pp. 19–22, 33, 76, 82–86, 96, 104, etc.

¹⁹⁹ Plaisted, 'Journal', and John Carmichael, 'A journey from Aleppo, over the desert, to Basserah, October 21, 1771', in *Desert Route*, (ed.) Carruthers, pp. xxxiii–xxxiv, 67–68, 80, 93, 128, 138, 176.

²⁰⁰ For comparison, see Sarah D. Shields, 'Sheep, nomads and merchants in nineteenth-century Mosul: creating transformations in Ottoman society', *Journal of Social History* 25 (1992), pp. 773–789.

²⁰¹ Mengin, *Histoire*, Vol. ii, p. 174; Burckhardt, *Notes*, Vol. i, p. 203. Eighteenth-century East India Company records indicate a strong interest in raw wool exports from the Persian Gulf. But they specify Kerman (Carmenia) wool, not Najdi wool.

²⁰² De Corancez, *Histoire*, p. 80, records that a single sheep sold for 250 piastres during a 'cruel famine' in Medina. During the reign of the third Saudi emir, the taxes collected on sheep and camels were a very significant source of revenue, as noted by Fattah, *Politics of Regional Trade*, pp. 50–51.

²⁰³ Abū Haykal, 'Tijāra', pp. 34, 41, 44.

ethno-religious community, *millet-i Rûm*, or—what seems more likely—Ottoman subjects from Anatolia and Rumelia.²⁰⁴

These horses were an exorbitant luxury. From the sixteenth to the eighteenth centuries, there was great foreign demand for them, so much so that a historian of animal breeding has described in some detail 'the global spread of Arabians'.²⁰⁵ Of course, Arabians were exported before this time. Egypt under the Mamluks, northern India under the Delhi Sultanate, and the Deccan Plateau under Vijayanagara's rule were important destinations. But significant changes took place in the early modern period. First, the Portuguese tried to assume control of the export of horses from the Persian Gulf to South Asia early on in their imperial ventures: the conquest and profitability of Goa had much to do with this trade, as half of the city's revenue came from it.²⁰⁶ Second, the finest Arabians were so rare that they made ideal diplomatic gifts and served as symbols of conspicuous consumption.²⁰⁷ Third, a preference for fast war horses by light cavalries meant increasing demand for Arabian breeds, especially in the Ottoman and Mughal empires and by the British East India Company.²⁰⁸

Programmes for breeding and crossbreeding 'Barbs', 'Turks', and 'Arabs' for war or sport were an intriguing manifestation of these trends. The earliest of them arose in sixteenth-century Poland and was based initially on Ottoman horses captured in war. Others followed in England, Prussia, France, and India, where mixed 'Arabian' breeds of uncertain provenance were highly valued.²⁰⁹ What the superintendent of an East India Company stud farm would call 'Arabomania' spread widely, even reaching Southeast Asia.²¹⁰ In the second half of the seventeenth century, stories began circulating in England about the way that Bedouin kept 'the Genealogies of their Horses' as carefully as princes kept 'their own Pedigrees'.²¹¹ An English guide to being a gentleman could claim that the Arabian horse was 'no stranger' in the country. It recommended importing a stallion from an Ottoman port on the Mediterranean, Scanderoon (Alexandretta), to 'beautify your Race' and breed the perfect hunter.²¹² This enterprise culminated in the import of two of the most famous founding sires in Thoroughbred history: the Darley

²⁰⁶ M. N. Pearson, The Portuguese in India (Cambridge, 1987), p. 50.

²⁰⁷ On affection for Oriental luxuries, including Arabian horses, by the court of Louis XIV, see Ina Baghdiantz McCabe, *A History of Global Consumption:* 1500–1800 (New York, 2015), p. 123.

²⁰⁹ Derry, Bred for Perfection, pp. 107–108, and Derry, Horses in Society, pp. 106–107. On one such mixed 'Arabian' breed, the jungle tazee, see J. P. Pigott, A Treatise on the Horses of India (Calcutta, 1794), p. 15.

²¹⁰ Jos Gommans, 'The horse trade in eighteenth-century South Asia', *Journal of the Economic and Social History of the Orient* 37.3 (1994), pp. 228–250 at 247. A pioneering study of the global spread of Arabians (originally published in 1834) estimated that 800 to 1,000 horses of Arabian descent (many bred or crossbred in Persia or India) were imported to Southeast Asia annually; see Karl Wilhelm Ammon, *Historical Reports on Arab Horse Breeding and the Arabian Horse: Collected Reports from Early Travellers to Arabia*, (trans.) H. Stäuble (Hildesheim, 1993), pp. 9–10.

²¹¹ William Cavendishe, A New Method, and Extraordinary Invention, to Dress Horses, and Work them according to Nature: As also, to Perfect Nature by the Subtility of Art (London, 1667), p. 72. Cavendish's remarks were frequently repeated, with and without attribution, in seventeenth- and eighteenth-century works.

²¹² Nicholas Cox, The Gentleman's Recreation: In Four Parts, viz. Hunting, Hawking, Fowling, Fishing. Wherein these Generous Exercises are Largely Treated of, and the Terms of Art for Hunting and Hawking more amply Enlarged than heretofore..., 3rd edn. With the Addition of a Hunting-Horse (London, 1686), p. 9 of the Appendix.

²⁰⁴ Lam^c al-Shihāb, p. 183 (511).

²⁰⁵ Margaret Elsinor Derry, Horses in Society: A Story of Animal Breeding and Marketing [Culture], 1800-1920 (Toronto, 2006), p. 106. Also see Margaret E. Derry, Bred for Perfection: Shorthorn Cattle, Collies, and Arabian Horses Since 1800 (Baltimore, MD, 2003), Chapter 5. As the titles indicate, most of the evidence cited by Derry concerns the nineteenth-century trade in Arabians, and her work mainly focuses on European imports. Nevertheless, she refers to Ottoman, Polish, Prussian, English, and French demand before 1800.

²⁰⁸ Fattah, Politics of Regional Trade, p. 160; Margaret Greely, Arabian Exodus (London, 1975), pp. 26–27, 32; S. Inayat and A. Zaidi, 'Cavalry Horses in Mughal Army', Proceedings of the Indian History Congress 42 (1981), pp. 268–274.

Arabian, purchased in Aleppo in 1704, and the Godolphin Barb, whose descendants' DNA confirms what has long been suspected—the horse's Arabian ancestry.²¹³ With grudging respect for England's horse-breeding accomplishments, a French author argued in 1788 that France should make every effort to import Arabian studs as well—even if this meant travelling all the way to Aden or the legendary Cape of Fartach—for these horses belonged to 'the only pure species in the entire universe' and had 'the most perfect seeds'.²¹⁴

Arabians were outrageously expensive. Despite his expertise in horse breeding and his privileged social status, the first Duke of Newcastle knew little about 'Right Arabians' besides the 'strangest' report that they were 'Nurst with Camels-Milk' and sold, as many merchants and 'Gentlemen of Credit' had told him, for 1,000 to 3,000 pounds a horse, an 'Intollerable' and 'Incredible Price'.²¹⁵ Tavernier recounted that the Mughal emperor's ambassador had paid 3,000 to 6,000 *écus* for some very fine Arabians but balked at the cost of the most extraordinary specimen—on offer for 10,000 *écus*. The sum on its own may say little today. It is worth comparing it to diamonds, whose value Tavernier (the exporter of the Hope Diamond) knew better than anyone else. When the Safavid Khan of Kerman wanted a precious stone to celebrate his inauguration and decorate his dagger, the gem merchant presented him with a diamond worth 800 *écus*. A dozen such diamonds would have covered the cost of the most coveted horse.²¹⁶

Başra, where Tavernier met the Mughal ambassador, was a significant entrepôt. Not far from the city in 1639, while travelling in the desert that lies southwest of the Euphrates, the Frenchman encountered one Bedouin chief journeying to South Arabia with 500 horses. He also visited for a while with one of the 'most powerful Emirs of Arabia', the leader of a caravan that consisted of 2,000 horses and 50 camels bearing female riders guarded by eunuchs.²¹⁷ Even after the plague of 1773, which had a devastating effect on the city and its commerce, Başra remained a good place to buy 'rare Arab horses' that fetched a 'considerable price' from pleasure-seeking gentlemen in India.²¹⁸ Manesty, the son of an English shipowner involved in the infamous trade of Birmingham guns for African slaves, set up his horse-exporting business in this city and became one of the chief suppliers of Arabians for East India Company horsemen.²¹⁹

²¹³ On this trade, see Erika Schiele, *The Arab Horse in Europe: History and Present Breeding of the Pure Arab*, (trans.) Anthony Dent (London, 1970), pp. 8, 19–20, 89, 139, 253; and Donna Landry, *Noble Brutes: How Eastern Horses Transformed English Culture* (Baltimore, MD, 2008), pp. 2, 79–79. Both authors emphasise that eighteenth-century European importers and breeders were not as obsessed with Arabians' purity and provenance as were their successors.

²¹⁴ Préseau de Dompierre, Traité de l'éducation du cheval en Europe, contenant le développement des vrais principes des haras, du vice radical de l'éducation actuelle, et des moyens de perfectionner les individus, en perfectionnant les espèces; avec un plan d'exécution pour la France (Paris, 1788), pp. 11–12, 228.

²¹⁵ Cavendishe, New Method, p. 72.

²¹⁶ Tavernier, Six voyages, pp. 107-108, 173.

²¹⁷ Ibid., pp. 168–170.

²¹⁸ J. Griffiths, Travels in Europe, Asia Minor and Arabia (London, 1805), pp. 389-390.

²¹⁹ In an 1802 auction, the Arab horses that Manesty sent from Başra to Seringapatam sold for 175 to 365 pagodas (approximately 1,350 to 2,830 shillings or 675 to 1,415 rupees) each. We happen to know this because of a letter that Arthur Wellesley, the governor of Seringapatam and future Duke of Wellington, sent to Manesty expressing his distress at fixing 'a price upon the property of any gentleman'. Arthur Richard Wellesley (ed.), *Supplementary Despatches and Memoranda of Field Marshal Arthur Duke of Wellington. India 1797-1805.* Vol. iii, *Dec. 14, 1801-Feb. 14, 1803* (London, 1859), pp. 158–159. In another letter, Wellesley indicated that the 'gun-horses of the cavalry are the best in each regiment' and normally sold for 250 to 300 pagodas (p. 535). Abdullah, *Merchants*, p. 40, suggests that the Başran horse trade did not 'take off' until the nineteenth century, yet there are many references to it in earlier sources.

Less spectacular Arabians were also costly. In India in the second half of the eighteenth century, they generally sold for 1,000 to 2,000 rupees each, while an indigenous breed cost just 15 to 100 rupees.²²⁰ Niebuhr, the Danish explorer, knew that prices varied greatly depending on the type of horse and the place of purchase. Work horses of unknown ancestry (Kadîschis) were far cheaper than Bedouin-raised Kochlânis (kuhaylis), which were bred in isolation and foaled in the presence of witnesses. The finer class of horses was in turn linked to various 'families' that could be found in different towns. For instance, in Mosul and Aleppo, one could buy Dsjúlfa, Mânaki, and Seklaúi breeds, as well as others; in Damascus, one could buy Nédsjedis-that is, Najdis. During his stay in Mocha, Niebuhr heard that Englishmen could purchase a fine specimen from the most esteemed breed for 800 to 1,000 Species Thaler. As a collector of artefacts, to him this sum represented four to five times the cost of a unique celestial globe, made in Mecca out of leather and adorned with gold stars and constellation names, which he found in the possession of a Jewish astrologer in Cairo. For the English merchant, it just represented an opportunity: he was confident that he could sell the horse for twice the amount in Bengal (around 4,800 to 6,000 rupees), yet hoped to get four times the amount in England (around 960 to 1,200 pounds).²²¹

These sums matter when we try to understand the reasons for the rise of a state in Najd. It is far from clear how many matchlocks a Najdi merchant might have been able to acquire for the price of a single Arabian, but definitely very many of them. In eighteenth-century England, high-quality muskets cost around 20 to 22 shillings; cheap ones, those made for the West African exchange of slaves for guns, just seven to nine shillings a piece.²²² With 1,000 pounds, the price of a fine Arabian in England, one could purchase there 2,500 Birmingham trade guns. Exchange rates in India are also revealing. The Maratha Empire was able to buy 'excellent matchlocks' for five to eight rupees a piece.²²³ For 1,000 rupees, the price of an inexpensive Arabian horse, a Maratha administrator could in theory have acquired 125 to 200 guns. At this rate, a 6,000-rupee Najdi horse was worth, in India, the equivalent of 750 to 1,200 matchlocks. Of course, merchants from Najd must have gotten less money for their horses, perhaps as little as a third or a quarter of the price in Bombay.²²⁴ Maybe they also paid more for their guns.

But what is a good guess? Gun prices varied greatly, since they depended on factors such as quality and decorations, not to mention supply and demand. The cheapest match-locks, such as the one that Abbott observed in the antelope hunter's hands—might indeed have cost just two or three piastres in the 1780s. Burckhardt would describe the typical matchlock as 'often not worth more than one dollar', by which he meant a Spanish *real de a ocho.*²²⁵ Lam^c al-Shihāb gave a range of roughly coinciding figures: it noted, as revealed

²²⁰ Gommans, 'Horse trade', p. 239.

²²¹ Niebuhr, *Beschreibung von Arabien*, pp. 162–164. On the celestial globe, see p. 117. On the objects collected by Niebuhr and the Danish expedition, see the wonderful book by Anne Haslund Hansen, *Niebuhr's Museum: Artefacts and Souvenirs from the Royal Danish Expedition to Arabia* 1761–1767, with photographs by Torben Eskerod, (trans.) Dan A. Marmorstein (Copenhagen, 2016). For currency conversions, I used the following equivalencies: one Species Thaler or trade dollar = 32 gute Groschen = three rupees = six shillings. These are estimates; actual exchange rates varied greatly.

²²² Priya Satia, *Empire of Guns* (New York, 2018), pp. 31–32; J. E. Inikori, 'The import of firearms into West Africa 1750–1807: a quantitative analysis', *Journal of African History* 18.3 (1977), pp. 355, 360.

²²³ T. T. Mahajan, Maratha Administration in the 18th Century (New Delhi, 1990), p. 141.

²²⁴ Gommans, 'Horse trade', p. 235.

²²⁵ Burckhardt, *Notes*, Vol. i, p. 236. In his discussion of the standard *diyah* (wergild) among the 'Anaza, Burckhardt mentions the expectation of 50 she-camels, a swift riding camel, a coat of mail, a slave, and a gun 'not worth more than a few piastres' (Vol. i, p. 153). A study of eighteenth-century Ottoman inheritance registers reveals that imported European pistols and muskets cost as little as two piastres (around 4.2 *reales de a ocho*, or five shillings, nine pence) but sometimes much more (36 pounds); the median value was 3,175 aspers (three

in the opening anecdote, that Wahhabi matchlocks sold for just five, eight, or ten *aryul*, Spanish *reales*.²²⁶ Prices fluctuated, of course. Currency conversions are unreliable. And nobody should take prices in the 1810s—when every Bedouin could afford a gun by selling a feathered ostrich skin or a she-camel—as reflective of prices earlier.²²⁷ Still, it would be surprising if, during the rise of the Saudi state, the sale of each Najdi stallion did not bring enough cash to buy 50 to 500 matchlocks. Prized mares, rarely sold, might have fetched considerably more: the equivalent of 250 to 900 matchlocks each.²²⁸

There is a sound economic reason, furthermore, to speculate that matchlocks were never more affordable than in the age of Ibn ^cAbd al-Wahhāb. The eighteenth century happens to be the century when many armies made the transition from matchlocks to flintlocks. In Europe and in the Ottoman Empire, this must have meant a great abundance of firearms that appeared inferior and obsolete. Many of these weapons were doubtless converted, recycled, or discarded. Others were sold and ended up in peripheral dumping grounds like Najd, whose warriors had no reservations about buying outmoded weapons. In fact, they generally preferred matchlocks to flintlocks.

If it is true that Arabian horses and other regional products gave Najdi towns the means to acquire material resources for state expansion, then what role did Wahhabi ideology and Saudi policy play? Ibn 'Abd al-Wahhāb's charges of infidelity or apostasy against professed Muslims allowed the Saudi state to justify violence against both enemies and rebels, and to present both regular 'Islamic' taxes and tributary demands as legitimate. Warriors on his jihad could count on receiving their due share of the booty in accordance with *sharī*^ca rules. In addition, the Saudi emirate came up with effective strategies for territorial expansion that cannot be attributed to Wahhabism. Among these it is worth bearing in mind the methodical use of agricultural sabotage under the cover of musket fire, which brought fortified towns to surrender, and the punitive system of conscription that led both to the growth of the irregular army and to the acquisition of fugitives' and abstainers' horses, camels, and sheep.

The emirate's ideological organisation as well as these political-military strategies might have compensated for what Dir'iyya lacked around 1750: the oasis city did not have a geographical or environmental advantage over other major towns in Najd and the Persian Gulf. It did not have the greatest supply of dates, horses, and pastoralist products. It was not optimally located to benefit from caravan trade. And, unlike the Afro-Atlantic kingdom of Dahomey or the Pacific island chiefdoms of Bau and Tahuata, it had nothing like a critical seaport or mountain pass station to monopolise the supply—or even aspire to control the influx—of foreign weapons inland. These limitations make its expansion during the military career of 'Abd al-'Azīz ibn Muḥammad, the second Saudi emir, an enduring puzzle.

pounds, 16 shillings). Fatma Müge Göçek, Rise of the Bourgeoisie, Demise of Empire: Ottoman Westernization and Social Change (New York, 1996), p. 106.

²²⁶ Accordingly, the middling matchlock's cost would have been one *real de a ocho*. The alternative interpretation, that *aryul* designated Maria Theresa thalers, seems unlikely given Burckhardt's estimate.

²²⁷ Burckhardt noted the price of an ostrich skin with feathers attached to it (ten Spanish dollars) and the official price of a she-camel (eight Spanish dollars). See his *Notes*, Vol. i, pp. 219–220, 315.

²²⁸ According to Burckhardt (*Notes*, i, p. 207, and Vol. ii, pp. 56–58), the price of Arab stallions in Syria ranged from ten to 120 pounds. Most of those on the market of Başra came not from Central Arabia, but from the banks of the Euphrates, where they were raised by the Muntafiq confederation. An Arab mare could 'scarcely be obtained under sixty pounds'. A price of 200 pounds for a celebrated specimen was not unusual; exceptional ones were worth considerably more (Burckhardt, *Notes*, Vol. ii, pp. 64, 129). A Spanish dollar was roughly equivalent to four shillings and four pence; at this exchange rate, ten pounds sterling were worth slightly more than 46.50 Spanish dollars.

However, had Ibn 'Abd al-Wahhāb not formed an alliance with Ibn Sa'ūd, state-making processes-that is, political centralisation and territorial expansion-would still have occurred in eighteenth-century Najd, due to the transformative power of firearms.²²⁹ That is the lesson of history and, indeed, there is no reason to focus myopically on the reasons for the triumph of the Emirate of Dir^ciyya since this was not an inevitable outcome. Actually, its prolonged struggle to establish itself as the main regional power indicates otherwise. It could easily have lost its long war against Riyadh or been defeated in the 1760s by an effective alliance between major Najdi rivals and the well-armed Isma^cili state of Najran. Had Riyadh won, today historians would be speculating about the ideological origins of the Dawwasi state and dwelling on Suhaymism.²³⁰ Other alternative scenarios seem plausible, too: a unified state in Wadī al-Rumma, with Burayda as its commercial capital, or the westward expansion of a Persian Gulf emirate across the Dahnā² sand belt. The dominant power in al-Qatīf, the Banū Khālid confederation of citizens and nomads, had considerable advantages: historical ties to Najd, a Sunni-Shi^cite constituency, and privileged access to seaborne guns. The point is not that Wahhabism was irrelevant to the making of the Saudi emirate; it was crucial to this state's legitimation and reform-oriented organisation. However, in the age when foreign matchlocks spread throughout Najd, Wahhabi ideas might have mattered far less militarily-as weapons of state expansion-than did Wahhabi guns.

Acknowledgements. A fellowship from the National Endowment for the Humanities (NEH) gave me the time and resources needed to research and write this article. I am pleased to acknowledge this support, but wish to clarify that any views and conclusions expressed in this publication do not necessarily reflect those of the NEH. I benefitted from the engagement with my scholarship in a webinar on 'Exchanges across Religious Lines: Material Interests and Representations' under the auspices of the NYU Abu Dhabi, Australian Catholic University, and University of Copenhagen joint initiative on 'Recognizing Religion(s): The Cultural Dynamics of Religious Encounters'. Finally, I would like to express my thanks to Brian DeLay and Francesca Trivellato for stimulating conversations and reading suggestions, and to Michael Cook and this journal's anonymous reviewers for thoughtful comments on a draft.

Conflicts of interest. None.

²²⁹ Marshall Hodgson, *Venture of Islam* (Chicago, 1977), Vol. iii, famously recognised guns' transformative political effects. He described the Saudi emirate at the end of this volume as but an example of a premodern state established by a 'primitive' religious movement that lacked what ultimately defeated it: the firepower of 'early modern' empires. If guns should be accepted as markers of periodisation in world history, then the Emirate of Dir'iyya may now be categorized as yet another early modern state.

²³⁰ Ibn 'Abd al-Wahhāb's rival Sulaymān ibn Suḥaym was one of Riyadh's theologians during Ibn Dawwās's rule, as David Commins, *Wahhabi Mission and Saudi Arabia* (London, 2005) pp. 19–20, explains.

Cite this article: Halevi L (2023). Arabians for guns: Wahhabi matchlocks, world trade, and the rise of the first Saudi state. *Journal of the Royal Asiatic Society* **33**, 401–442. https://doi.org/10.1017/S1356186322000219