INTRODUCTION

The Dutch Empire and Germanophone Europe

"It is remarkable," Dutch officer Bloys van Treslong Prins declared in his 1935 address to the German Society for Natural History and Anthropology of East Asia in Batavia, "how many Germans one encounters when studying […] the history of the Dutch East Indies. In the early years, they were mostly adventurers and desperados, the same kind of people you find in the foreign legions today […]. However, from the eighteenth century onwards, only the very best travelled from Germany to […] this *Wunderland*;[1] thus there are quite a few Germans who owe a lot to the Indies, but there are also quite a few Germans to whom the Indies owe a lot."[2]

In the course of his speech, Van Treslong Prins particularly emphasized the important role of "German" professionals such as "physicians, clergymen, soldiers, merchants, planters, sailors, carters, musicians, cooks, butchers" who left their mark on the Dutch East Indies over three centuries, a fact that Dutch observers were well aware of at the time.[3] However, what the Dutch officer did not address was that for much of the period he referenced (it reaches back to the seventeenth century), modern-day "Germany" did not exist. In fact, many of the individuals he labelled "German" were born in the Habsburg Empire, the German-speaking parts of Bohemia, Prussia, parts of which today belong to Poland, or the (Old) Swiss Confederacy. What united them was not a national identity, but rather a shared linguistic, professional, or social background.

Among the many professional groups recruited in German-speaking Europe for Dutch colonial services, physicians were second in number only to soldiers.[4] Yet, despite their significant presence in the Dutch East Indies, they have remained largely overlooked in historical scholarship. Addressing this lacuna, *Medical Mercenaries* is the first comprehensive study to put the spotlight on the trajectories

[1] Emphasis added.

[2] B. van Treslong Prins, *Die Deutschen in Niederländisch-Indien: Vortrag gehalten in der Ortsgruppe Batavia am 30. September 1935* (Leipzig: Otto Harrassowitz, 1937), 1.

[3] Ibid.

[4] See P. Krauer, *Swiss Mercenaries in the Dutch East Indies: A Transimperial History of Military Labour, 1848–1914* (Leiden: Leiden University Press, 2024); M. Bossenbroek, *Volk voor Indië: De werving van Europese militarien voor de Nederlandes koloniale dienst 1814–1909* (Amsterdam: Van Soeren, 1992). For the high presence of German physicians in the Dutch Colonial Army see P. Teichfischer, "Transnational Entanglements in Colonial Medicine: German Medical Practitioners as Members of the Health Service in the Dutch East Indies (1816–1884)," *Histoire, médecine et santé* 10 (2016), 63–78.

of the more than 300 physicians from the German-speaking parts of Switzerland, the German States and Empire, and Habsburg Austria, who served in the Dutch East Indies in the late nineteenth and early twentieth centuries.

These physicians acted as "medical mercenaries" both in a literal and metaphorical sense.[5] Literally, they operated within a medical system in which the *Koninklijk Nederlandsch-Indisch Leger* (Dutch Colonial Army; KNIL) maintained a near-monopoly on European health care, and most foreign Europeans in Dutch colonial medical services were recruited as military medical officers. The emergence of civil hospitals and research institutes was closely tied to this military monopoly: many civil facilities, such as plantation or mining estate hospitals, were privately owned and often founded in response to the colonial government's prioritisation of military medical institutions. Metaphorically, medical mercenaries acted as hired agents of (civil) medical institutions whose work extended beyond disinterested or philanthropic care. Civil hospitals and research facilities in the Dutch East Indies primarily focused on maintaining the health of soldiers, settlers, and indentured labourers, and were often shaped by the same disciplinary and biopolitical regimes that shaped military medicine. Importantly, however, despite their close connection to the Dutch colonial regime, medical mercenaries were not merely "tools of empire":[6] their decisions to enter colonial service often reflected professional ambitions, personal interests, and scientific agendas that could diverge from those of their employers.

Apart from constituting a hitherto understudied group of actors, the case of German-speaking physicians in the Dutch East Indies also offers fresh perspectives on the history of colonial medicine and its practitioners more broadly. First, it sheds new light on the border crossing – and at times truly global – nature of medical knowledge production.[7] Rather than examining Switzerland, Germany, Austria, the Netherlands and the Dutch East Indies as separate entities in the making of medical

[5] I use the term "mercenaries" to capture both the financial and professional incentives that drew individuals to the military and civil health institutions of the Dutch East Indies, as well as the sense of "foreignness" that many German-speaking medical professionals reported experiencing in the Dutch Empire. For a broader discussion of the term "mercenary" see S. Morillo: "Mercenaries, Mamluks and Militia: Towards a Cross-Cultural Typology of Military Service," in J. France (ed): *Mercenaries and Paid Men: The Mercenary Identity in the Middle Ages* (Leiden: Brill, 2008), 243–60.

[6] For the conceptualisation of colonial medicine as "tool of empire", see D. Headrick, *The Tools of Empire: Technology and European Imperialism in the Nineteenth Century* (New York: Oxford University Press, 1981).

[7] See D. Neill, *Networks in Tropical Medicine* (Stanford: Stanford University Press, 2012); B. M. Bennet and J. M. Hodge (eds), *Science and Empire: Knowledge and Networks of Science across the British Empire, 1800–1970* (Basingstoke: Palgrave Macmillan, 2011); A. Digby, W. Ernst, and P. B. Mukharji (eds), *Crossing Colonial Historiographies: Histories of Colonial and Indigenous Medicines in Transnational Perspective* (Newcastle upon Tyne: Cambridge Scholars Publishing, 2010).

theory and practice, this study adopts the analytical lens of *Germanophoneness* to delimit its spatial framework and to reconstruct transimperial connections between individual regions, nations, and empires.[8] Indeed, as various examples in this book demonstrate, German-speaking physicians in the Dutch East Indies were not primarily connected through national affiliation, but rather through their social, educational, or linguistic background and a shared commitment to the values and virtues of the "modern" medical sciences.

Second, the book analyses official medical publications alongside intimate testimonies such as letters, diaries, or travelogues, revealing that medical professionals' decisions to embark on imperial careers were driven by motives that went beyond allegedly disinterested scientific curiosity. Taking an intersectional perspective, it studies the construction of *medical masculinities in the tropics* to grasp how joining imperial services could merge multiple ambitions and shifting identities. For many physicians, the medical profession could function as a vehicle for upward social mobility and the accumulation of financial, cultural, and symbolic capital, an effect they hoped to amplify by travelling to the colonies and presenting themselves as widely travelled men of science. To others, modern medical subdisciplines such as tropical medicine and bacteriology offered a means to assert paternalistic power over racialised and gendered "others" in the colonies, or to claim scientific authority in the emerging field of laboratory science. Medical rationality and objectivity also often served as powerful tools in reinforcing class distinctions and embodying ideals of middle-class respectability in colonial settings. At the same time, in the colonial field, previously unknown diseases, acts of resistance or competing epistemologies severely threatened these claims to hegemony and limited physicians' scope for action, revealing the inherently fragile nature of European medical masculinities in the tropics.[9]

Third, rather than studying the history of colonial medicine through the development of theories, *Medical Mercenaries* focuses on practitioners "on the spot". This focus helps shed light on the colonial underpinnings and contingent relationship between medical theory and practice in the age of the "laboratory revolution" in medicine. By examining German-speaking medical officers, civil doctors, and plantation physicians employed with colonial health care institutions in the Dutch East Indies, the book explores the role of experiences in the colonial field in shaping "modern" medical subfields such as bacteriology, tropical medicine, and hygiene as

[8] For German-speaking Europe as a distinct space of scholarly exchange from a (albeit Eurocentric) history of science perspective, see D. Phillips, *Acolytes of Nature: Defining Natural Science in Germany, 1770–1850* (Chicago: The University of Chicago Press, 2012), 1–10.

[9] For the "fragility" of "white masculinity", also see W. Anderson: "The Trespass Speaks: White Masculinity and Colonial Breakdown," *The American Historical Review* 102:5 (1997), 1343–70.

well as to the crucial role of colonial armies, hospitals, laboratories, and plantation estates as key sites of medical knowledge production. It covers the period from 1873 – when the Dutch Empire launched its war against the Sultanate of Aceh and medicine became increasingly vital due to the high fatality rates among soldiers succumbing to "tropical" diseases – through the rise of experimental laboratory medicine in the 1880s and 1890s, concluding with the establishment of a civil health-care system in the 1910s and 1920s in the context of the Dutch colonial government's "ethical turn." Adopting a longue durée perspective, the book reconstructs broader shifts in transimperial demands for medical expertise and personnel, as well as the relationship between Dutch colonial policy and German-language medical discourse more broadly. It specifically highlights how racial ideology shaped the supposedly "objective" biomedical sciences at the turn of the twentieth century, even in regions such as Switzerland or the Habsburg and the German Empire, that are often believed to be barely affected by colonial ideology.

Transimperial Demands and German-speaking Europe

The recruitment of over 300 physicians from the German-speaking parts of Habsburg Austria, Switzerland, and the German States and Empire for Dutch colonial services must be understood within the broader context of global markets for labour and expertise that emerged in the early modern period and continued to shape the connections between different European nation states and empires up until the early twentieth century. From the seventeenth century onwards, trading companies such as the Dutch East and West India Companies (*Verenigde Oostindische Compagnie* [VOC]; *Westindische Compagnie* [WIC]) and the English/British East India Company (EIC) faced enormous demands for manpower that could not be fulfilled within the confines of individual states, principalities, or kingdoms. As a consequence, soldiers, sailors, cooks, craftsmen, and ship surgeons were hired through recruitment networks that spread across Europe.[10] These impe-

[10] See J. van Lottum: "Their Last Days in Europe: Germans on the Amsterdam VOC Fleet of 1775," in C. Brauner et al.: *Encountering the Global in Early Modern Germany: Microhistories of Mobility, Materiality, and Belonging* (New York: Berghahn, 2025), 25–44; J. van Lottum and L. Petram, "In Search of Strayed Englishmen: English Seamen Employed in the Dutch East India Company in the Late Seventeenth and Eighteenth Centuries," in S. Levelt, E. van Raamsdonk, and M. D. Rose (eds), *Anglo-Dutch Connections in the Early Modern World* (New York: Routledge, 2023), 100–11; J. van Lottum, J. Lucassen, and L. Heerma van Voss, "Sailors, National and International Labour Markets and National Identity, 1600–1850," in R. Unger (ed), *Shipping and Economic Growth 1350–1850* (Leiden: Brill, 2011), 309–51; J. Lucassen, "A Multinational and its Labor Force: The Dutch East India Company, 1595–1795," *International Labor and Working-Class History* 66 (2004), 12–39.

rial labour markets continued to exist after the VOC (bankrupt in 1799) and the EIC (dissolved in 1874) lost power, and their colonial possessions were gradually transferred to the European monarchies, republics, and nations, which continued to rely on foreign labour and knowledge to sustain imperial expansion. David Arnold has described this dynamic between imperial demands for labour and expertise and the recruitment of foreigners for imperial services as "contingent colonialism," or the "complementarity between what the imperial power could itself provide (not least in administrative infrastructure) and what outsiders could offer by way of additional skills, expertise and commodities […]."[11]

The significance of a foreign European imperial workforce and knowledge has been particularly well established in the case of Germans in the British Empire. In the late eighteenth century, for example, Hanoverian regiments served the British East India Company.[12] From the nineteenth century onwards, university-educated men from the German States became increasingly sought after for British imperial service, as the prestige of "Humboldtian science" enhanced the reputation of German expertise across Europe.[13] German botanists, naturalists, intellectuals, engineering or forestry experts became highly demanded by the British Empire, which – at least until the mid-nineteenth century – lacked sufficient skilled personnel to survey, study, and exploit its overseas territories.[14]

[11] D. Arnold, "Globalization and Contingent Colonialism: Towards a Transnational History of 'British' India," *Journal of Colonialism and Colonial History* 16:2 (2015), online, DOI: 10.1353/cch.2015.0019. See also K. Manjapra, "The Semiperipheral Hand: Middle-Class Service Professionals of Imperial Capitalism," in C. Dejung, D. Motadel, and J. Osterhammel (eds), *The Global Bourgeoisie: The Rise of the Middle Classes in the Age of Empire* (Princeton: Princeton University Press, 2019), 184–204.

[12] See C. Tzoref-Ashkenazi, *German Soldiers in Colonial India* (London: Routledge, 2016). For German soldiers and officers in "foreign" imperial services, also see C. Kamissek, "German Imperialism before the German Empire: Russo-Prussian Military Expeditions to the Caucasus before 1871 and the Continuity of German Colonialism," *Journal of Modern European History* 14:2 (2016), 183–201. That high-ranking German mercenary officers could make a lasting impact is evident from D. Rothermund, "Carl August Schlegel's Military Geography of the Carnatic," in R. Ahuja and M. Christof-Füchsle (eds), *A Great War in South India: German Accounts of the Anglo-Mysore Wars, 1766–1799* (Berlin: De Gruyter, 2021), 79–92.

[13] See A. Daum, "Science, Politics, and Religion: Humboldtian Thinking and the Transformations of Civil Society in Germany, 1830–1870," *Osiris* 17 (2002), 107–40; M. Dettelbach, "Humboldtian Science," in N. Jardine, J. Secord, and E. Spary (eds), *Cultures of Natural History* (Cambridge: Cambridge University Press, 1996), 287–304.

[14] See A. Daum, "German Naturalists in the Pacific around 1800: Entanglement, Autonomy, and a Transnational Culture of Expertise," in H. Berghoff, F. Biess, and U. Strasser (eds), *Explorations and Entanglements: Germans in Pacific Worlds from the Early Modern Period to World War I* (New York: Berghahn, 2019), 79–102; M. von Brescius, *German Science in the Age of Empire: Enterprise, Opportunity and the Schlagintweit Brothers* (Cambridge: Cambridge University Press, 2019); J. Gascoigne, "The German Enlightenment and the Pacific," in L. Wolff and M. Cipollini (eds), *The Anthropology of*

Meanwhile, an emerging body of scholarship on "colonialism without colonies" has demonstrated that the labour markets for foreign expertise encompassed not only colonial "latecomers" like Germany or Belgium but also extended to regions without overseas empires of their own.[15] As an emerging body of literature has shown, settlers, missionaries, merchants, scientists, soldiers, and travellers from various Nordic countries, Switzerland, the Habsburg Empire, or parts of Central and Eastern Europe collaborated with and benefitted from foreign colonial powers.[16]

the Enlightenment (Stanford: Stanford University Press, 2007), 141–71; Arnold, "Globalization and Contingent Colonialism." Also see K. Manjapra, *Age of Entanglement: German and Indian Intellectuals across Empire* (Cambridge: Harvard University Press, 2014); J. Rüger, "Writing Europe into the History of the British Empire," in J. H. Arnold, M. Hilton, and J. Rüger (eds), *History after Hobsbawm: Writing the Past for the Twenty-First Century* (Oxford: Oxford University Press, 2017), 35–49; U. Kirchberger: "Between Transimperial Networking and National Antagonism: German Scientists in the British Empire During the Long Nineteenth Century," in A. Goss (ed), *The Routledge Handbook of Science and Empire* (London: Routledge, 2021), 138–47; idem: "German Scientists in the Indian Forest Service: A German Contribution to the Raj?," *The Journal of Imperial and Commonwealth History* 29:2 (2001) 1–26; T. Delfs, "Kolonialismus ohne Kolonien? Deutsche Naturforscher im Südasien des 18. und 19. Jahrhunderts" *Südasien Chronik* 12 (2022), 389–407.

[15] See P. Purtschert, F. Falk, and B. Lüthi, "Switzerland and 'Colonialism without Colonies': Reflections on the Status of Colonial Outsiders," *International Journal of Postcolonial Studies* 18:2 (2016), 286–302; G. Fur, "Colonialism and Swedish History: Unthinkable Connections?," in M. Naum and J. Nordin (eds), *Scandinavian Colonialism and the Rise of Modernity: Contributions to Global Historical Archaeology* (New York: Springer, 2013), 17–36; W. Telesko, "Colonialism without Colonies: The Civilizing Missions in the Habsburg Empire," in M. Falser (ed), *Cultural Heritage as Civilizing Mission: From Decay to Recovery* (Cham: Springer, 2015), 35–48; P. Purtschert, B. Lüthi, and F. Falk (eds), *Postkoloniale Schweiz: Formen und Folgen eines Kolonialismus ohne Kolonien* (Bielefeld: Transcript, 2012).

[16] For the Nordic countries, see J. L. Hennessey and J. Lathi, "Nordics in Motion: Transimperial Mobilities and Global Experiences of Nordic Colonialism," special issue in *The Journal of Imperial and Commonwealth History* 51:3 (2023) as well as the contributions in J. Höglund and L. Andersson Burnett, "Introduction: Nordic Colonialisms and Scandinavian Studies," special issue of: *Scandinavian Studies* 91:1/2 (2019). For Switzerland, see T. David, B. Etemad, and J. Schaufelbuehl, *La Suisse et l'esclavage des Noirs* (Lausanne: Ed. Antipodes, 2005); B. Ziegler, *Schweizer statt Sklaven: Schweizerische Auswanderer in den Kaffee-Plantagen von Sao Paulo (1852–1866)* (Stuttgart: Steiner, 1985); L. Pfäffli, *Arktisches Wissen: Schweizer Expeditionen und dänischer Kolonialhandel in Grönland (1906–1913)* (Frankfurt am Main: Campus, 2021); O. Pavillon, *Des Suisses au coer de la traite Négrière: De Marseille à l'Île de France, d'Amsterdam aux Guyanes (1770–1840)* (Lausanne: Ed. Antipodes, 2017); B. Schär, *Tropenliebe: Schweizer Naturforscher und niederländischer Imperialismus in Südostasien um 1900* (Frankfurt am Main: Campus, 2015); P. Harries, *Butterflies & Barbarians: Swiss Missionaries & Systems of Knowledge in South-East Africa* (Oxford: J. Currey, 2007); A. Zangger, Koloniale Schweiz: Ein Stück Globalgeschichte zwischen Europa und Südostasien (1860–1930) (Bielefeld: Transcript, 2014); C. Dejung, *Die Fäden des globalen Marktes: Eine Sozial- und Kulturgeschichte des Welthandels am Beispiel der Handelsfirma Gebrüder Volkart 1851–1999* (Köln: Böhlau, 2013); B. Veyrassat, *De l'attirance à l'expérience de l'Inde: Un Vaudois à la marge du colonialisme Anglais, Antoine-Louis-Henri Polier (1741–1795)* (Neuchâtel: Ed. Livreo-Alphil, 2022); B. Schär, "From Batticaloa via Basel to Berlin. Transimperial Science in Ceylon

According to the historian Bernhard C. Schär, the Dutch Empire had particularly high "demands" for European labour and expertise that could not be met within the Netherlands – a small country ruling over a vast overseas empire – creating various "opportunities" for foreigners from regions with no or late direct access to colonies.[17] Historians have showcased the German States and Empire as well as Switzerland as the most important recruitment area for Dutch colonial services. Scholars have, for example, pointed out the significant presence of Swiss and German sailors, naturalists, and settlers aboard the VOC ships and in early modern Dutch settlements.[18]

and Beyond around 1900," *The Journal of Imperial and Commonwealth History* 48:2 (2019), 230–262; Krauer, *Swiss Mercenaries in the Dutch East Indies*. For Habsburg Austria see S. Loidl, *'Europa ist zu enge geworden': Kolonialpropaganda in Österreich-Ungarn 1885–1918* (Vienna: Promedia Verlag, 2017); U. Bach, *Tropics of Vienna: Colonial Utopias of the Habsburg Empire 1870–1900* (New York: Berghahn, 2016); M. Falser, *Habsburgs Going Global: The Austro-Hungarian Concession in Tientsin/Tianjin in China (1901–1917)* (Vienna: Austrian Academy of Sciences Press, 2022); W. Sauer, "Habsburg Colonial: Austria-Hungary's Role in European Overseas Expansion Reconsidered," *Austrian Studies* 20 (2012), 5–23; S. Loidl, "Colonialism through Emigration: Publications and Activities of the Österreich-Ungarische Kolonialgesellschaft (1894–1918)," *Austrian Studies* 20 (2012), 161–75; H. Morrison, "Open Competition in Botany and Diplomacy: The Habsburg Expedition of 1783," *Studies in Eighteenth-Century Culture* 46 (2017), 107–19; J. Feichtinger and J. Heiss, "Interactive Knowledge-Making: How and Why Nineteenth-Century Austrian Scientific Travelers in Asia and Africa Overcame Cultural Differences," in J. Feichtinger, A. Bhatti, and C. Hülmbauer (eds), *How to Write the Global History of Knowledge-Making: Interaction, Circulation and the Transgression of Cultural Difference* (Springer: Cham, 2020), 45–69. For Central and Eastern Europe, see J. Mrázek (ed), *Escaping Kakania: Eastern European Travels in Colonial Southeast Asia* (Budapest: Central European University Press, 2024); T. Ewertowski, "Javanese Mosaic: Three Polish Representations of Java from the Second Half of the Nineteenth Century," *Indonesia and the Malay World* 50:147 (2022), 211–33; N. D. Wood, "Vagabond Tourism and a Non-Colonial European Gaze: Kazimierz Nowak's Bicycle Journey Across Africa, 1931–1936," *Journal of Tourism History* 14:3 (2022), 291–314; M. Grzechnik, "'Ad Maiorem Poloniae Gloriam!' Polish Inter-colonial Encounters in Africa in the Interwar Period," *The Journal of Imperial and Commonwealth History* 48:5 (2020), 826–45. Also see the contributions in B. Schär and M. Toivanen (eds), *Integration and Collaborative Imperialism in Modern Europe: At the Margins of Empire, 1800–1950* (London: Bloomsbury Academic, 2025).

[17] See B. Schär, "Introduction: The Dutch East Indies and Europe, ca. 1800–1930. An Empire of Demands and Opportunities," *BMGN – Low Countries Historical Review* 134:3 (2019), 7–9. For transnational or global perspectives on Dutch colonial history more broadly, also see R. Raben, "A New Dutch Imperial History? Perambulations in a Prospective Field," *BMGN – Low Countries Historical Review* 128:1 (2013), 5–30; S. Legêne, "The European Character of the Intellectual History of Dutch Empire," *BMGN – Low Countries Historical Review* 132:2 (2017), 110–20; K. Fatah-Black, "A Swiss Village in the Dutch Tropics," *BMGN – Low Countries Historical Review* 128:1 (2013), 31–52.

[18] See F. Hoyer, *Relations of Absence: Germans in the East Indies and their Families c. 1750–1820* (Uppsala: Acta Universitas Upsaliensis, 2020); Fatah-Black, "A Swiss Village in the Dutch Tropics"; R. van Gelder, *Het Oost-Indisch avontuur: Duitsers in dienst van de VOC (1600–1800)* (Nijmegen: Sun, 1997); L. Blussé and J. De Moor, *Een Zwitsers leven in de tropen: De lotgevallen van Elie Ripon in dienst van de VOC (1618–1626)* (Amsterdam: Prometheus, 2016); R. Reyes, "German Apothecaries and Botanists in Early Modern Indonesia, the Philippines, and Japan," in Berghoff/Biess/Strasser (eds), *Explorations and*

The global networks linking German-speaking Europeans with the Dutch Empire in Southeast Asia persisted well into the twentieth century, continuing to operate even after these regions transformed into modern nation states. In his seminal study, the historian Philipp Krauer has shed light on the transnational recruitment networks of the KNIL that enabled 5,800 Swiss mercenaries to join Dutch colonial services even after the foundation of the Swiss nation state in 1848.[19] Although less studied, the recruitment of Germans was numerically even more significant to sustain the KNIL's manpower.[20] In the second half of the nineteenth century, merchants and planters from Central and Northern Europe migrated to the Dutch East Indies in search of economic opportunities, playing a crucial role in developing the colonial plantation economy and expanding transimperial trade networks.[21] Others have shown that Swiss and German naturalists made substantial contributions to the scientific investigation of the Dutch East Indies' flora, fauna, and peoples, or how so-called ethnographic artifacts from the Dutch East Indies circulated between museums in Berlin, Dresden, and Vienna through transnationally operating art collectors.[22]

In sum, existing scholarship has significantly expanded the spatial and temporal reach of so-called "traditional" imperial powers such as the British,

Entanglements, 35–54; H. De Groot, "Engelbert Kaempfer, Imamura Gen'emon and Arai Hakuseki: An Early Exchange of Knowledge between Japan and the Netherlands," in S. Huigen, J. L. De Jong, and E. Kolfin (eds), *The Dutch Trading Companies as Knowledge Networks* (Leiden: Brill, 2010), 201–09.

[19] See Krauer, *Swiss Mercenaries in the Dutch East Indies*; B. Schär, "Switzerland, Borneo and the Dutch East Indies: Towards a New Imperial History of Europe, c. 1770–1850," *Past & Present* 257:1 (2022), 134–67; P. Krauer, "Welcome to Hotel Helvetia! Friedrich Wüthrich's Illicit Mercenary Trade Network for the Dutch East Indies, 1858–1890," *BMGN – Low Countries Historical Review* 134:3 (2019), 122–47; Bossenbroek, *Volk voor Indië*; M. Bossenbroek, "The Living Tools of Empire: The Recruitment of European Soldiers for the Dutch Colonial Army, 1814–1909," *The Journal of Imperial and Commonwealth History* 23:1 (1995), 26–53.

[20] See, for example, M. Bossenbroek, "'Dickköpfe' und 'Leichtfüsse': Deutsche im niederländischen Kolonialdienst des 19. Jahrhunderts," in K. Bade (ed), *Deutsche im Ausland – Fremde in Deutschland: Migration in Geschichte und Gegenwart* (Munich: Beck'sche Verlagsbuchhandlung, 1992), 249–54.

[21] See M. Toivanen, "A Nordic Colonial Career Across Borders: Hjalmar Björling in the Dutch East Indies and China," *The Journal of Imperial and Commonwealth History* 51:3 (2023), 421–41; Zangger, *Koloniale Schweiz*.

[22] See B. Schär, *Tropenliebe: Schweizer Naturforscher und niederländischer Imperialismus in Südostasien um 1900* (Frankfurt am Main: Campus, 2015); R. Reyes, "German Apothecaries and Botanists in Early Modern Indonesia, the Philippines, and Japan," in Berghoff/Biess/Strasser (eds), *Explorations and Entanglements*, 33–54; A. Weber, "Collecting Colonial Nature: European Naturalists and the Netherlands Indies in the Early Nineteenth Century," *BMGN – Low Countries Historical Review* 134:3 (2019), 72–95; C. Drieënhuizen, "Being 'European' in Colonial Indonesia: Collections between Yogyakarta, Berlin, Dresden and Vienna in the Late Nineteenth Century," *BMGN – Low Countries Historical Review* 134:3 (2019), 21–46.

German, or the Dutch,[23] while also highlighting the role of "colonial outsiders" like Switzerland or Nordic countries in sustaining, conquering and economically exploiting European overseas colonies. Yet, most existing studies examining the role of foreign Europeans in the Dutch (or British) Empire remain shaped by what Sebastian Conrad has called "methodological nationalism."[24] By focusing on imperial recruitment practices in Switzerland and German separately, historians have tended to overlook the broader pan-European dimension of foreign recruitment, scholarly networks, and ideological currents, as well as institutional and interpersonal exchanges that transcended individual nation-states.

Medical Mercenaries addresses this gap by shifting focus from narrowly defined national backgrounds – such as German, Swiss, or Austrian – to the recruitment of medical professionals from German-speaking Europe as a whole. Using the analytical lens of *Germanophoneness*, it traces both large-scale transimperial recruitment networks linking Switzerland, the German Empire, and the Habsburg Monarchy with the Netherlands and its empire, as well as the micro-historical dynamics behind individual careers shaped by border-crossing diasporic ties, academic exchanges, and professional mobility.[25] The focus on Germanophone Europe aids in exploring connections and alliances that extended beyond national affiliation, such as a shared language, academic culture, or social background, while also shedding light on disconnections stemming from differences in regional identities, linguistic barriers, cultural misunderstandings, or religious tensions.

In addition to broadening the geographical scope of Dutch recruitment of foreign experts, this book also bridges often disconnected time frames by covering the period from 1873 into the 1920s. These decades were marked by profound transformations, including the Dutch colonial government's shift from laissez-faire liberalism to a paternalistic "ethical policy," the rise and eventual collapse of the German Colonial Empire, and the oscillation of colonial medical discourse between national rivalry and scientific internationalism. By studying the history

[23] For global and transnational perspectives on the German Colonial Empire more broadly, see S. Conrad, *Globalisation and the Nation in Imperial Germany* (Cambridge: Cambridge University Press, 2006); S. Conrad and J. Osterhammel (eds), *Das Kaiserreich transnational: Deutschland in der Welt 1871–1914* (Göttingen: Vandenhoeck & Ruprecht, 2004); J. Osterhammel, *Die Verwandlung der Welt: Eine Geschichte des 19. Jahrhunderts* (München: CH Beck, 2009) B. Naranch and G. Eley (eds), *German Colonialism in a Global Age* (Durham: Duke University Press, 2014). For the Dutch Empire, see Raben, "A New Dutch Imperial History?"; S. Legêne, "The European Character of the Intellectual History of Dutch Empire," *BMGN – Low Countries Historical Review* 132:2 (2017), 110–120; Huigen/De Jong/Kolfin (eds), *The Dutch Trading Companies as Knowledge Networks*; D. Onnekink and G. Rommelse, *The Dutch in the Early Modern World: A History of Global Power* (Cambridge: Cambridge University Press, 2019).

[24] S. Conrad, *What is Global History?* (Princeton: Princeton University Press, 2016), 3.

[25] My notion of "transimperiality" builds on D. Hedinger and N. Heé, "Transimperial History – Connectivity, Cooperation and Competition," *Journal of Modern European History* 14:4 (2018), 429–52.

of transimperial labour markets in their longue-durée, the book demonstrates how shifting patterns of national competition and alliance reshaped recruitment practices and redefined the imperial career opportunities as well as the scopes of action available to German-speaking physicians over time.

Globalising Colonial Medicine

Although the range of professional groups considered by the historiography of transimperial labour markets in the age of empire has steadily expanded, encompassing missionaries, mercenaries, merchants, soldiers, sailors, or naturalists, physicians remain conspicuously absent from studies of foreign imperial services. With the notable exception of Philipp Teichfischer's survey of the recruitment of more than 300 German physicians for the Dutch colonial military's health services between 1816 and 1884, no study has systematically examined the role of medical professionals from German-speaking Europe in the Dutch Empire, despite the fact that they at times even outnumbered their Dutch colleagues.[26] This historiographical lacuna is all the more striking given the central role historians have attributed to medicine as a critical "tool of empire" in nineteenth-century imperial conquest.[27]

Over the past decades, the historiography of colonial medicine has moved beyond diffusionist models that imagined a one-way transfer of medical knowledge from European metropoles to colonial peripheries. Scholars have instead highlighted the hybrid nature of medical knowledge, showing how colonial practices were shaped through constant negotiation between European and indigenous actors, and how indigenous medical traditions informed European scientific developments.[28] Historians have also traced how colonial medicine reinforced

[26] See Teichfischer, "Transnational Entanglements in Colonial Medicine."

[27] See D. Headrick, *The Tools of Empire: Technology and European Imperialism in the Nineteenth Century* (New York: Oxford University Press, 1981). For the ways in which advances in tropical medicine, parasitology, and hygiene at the turn of the twentieth century influenced imperial culture and expansion, also see R. MacLeod and M. Lewis (eds), *Disease, Medicine and Empire: Perspectives on Western Medicine and the Experience of European Expansion* (London: Routledge, 1988); P. Curtin, *Death by Migration: Europe's Encounter with the Tropical World in the Nineteenth Century* (Cambridge: Cambridge University Press, 1989).

[28] Important studies in this field are H. Tilley, *Africa as a Living Laboratory: Empire, Development, and the Problem of Scientific Knowledge, 1870–1950* (Chicago: University of Chicago Press, 2011); P. Chakrabarti, *Medicine and Empire, 1600–1960* (Basingstoke: Palgrave Macmillan, 2014); D. Arnold, *Science, Technology and Medicine in Colonial India* (Cambridge: University of Cambridge Press, 2000); D. Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-Century India* (Berkeley: University of California Press, 1993); M. Harrison, *Public Health in British India: Anglo-Indian*

racial, gendered, and class hierarchies,[29] how colonial authorities intervened – often violently – in the everyday lives of colonised populations through public health policies and vaccination campaigns,[30] and how medicine served as a key ideological instrument of the "civilising mission."[31] Furthermore, a growing body of work has brought into focus the wide range of intermediaries such as nurses, medical officers, missionaries, so-called shamans, whose work was central to the making of colonial medicine.[32] Examining German-speaking physicians in the Dutch East Indies hence not only allows us to address the understudied role of foreign European medical professionals within the Dutch Empire but also has the

Preventive Medicine 1859–1914 (Cambridge: Cambridge University Press, 1994); M. Vaughan, *Curing their Ills: Colonial Power and African Illness* (Cambridge: Polity Press, 1991).

[29] See, for example, J. Downs, *Maladies of Empire: How Slavery, Imperialism, and War Transformed Medicine* (Cambridge: The Belknap Press of Harvard University Press, 2021); S. Seth, "Race and Science," in N. Hudson (ed), *A Cultural History of Race, vol. 4: In the Reformation and Enlightenment* (London: Bloomsbury Academic, 2021), 71–86; T. Lockley, *Military Medicine and the Making of Race: Life and Death in the West India Regiments, 1795–1874* (New York: Cambridge University Press, 2020); S. Seth, *Difference and Disease: Medicine, Race and the Eighteenth-Century British Empire* (Cambridge: Cambridge University Press, 2018); S. Marks, "What is Colonial about Colonial Medicine?," *Social History of Medicine* 10 (1997), 205–19; P. Lorcin, "Imperialism, Colonial Identity, and Race in Algeria, 1830–1870: The Role of the French Medical Corps," *Isis* 90:4 (1999), 653–79; L. Schiebinger, "The Anatomy of Difference: Race and Sex in Eighteenth-Century Science," *Eighteenth-Century Studies* 23 (1990), 387–405.

[30] See N. Bhattacharya, *Contagion and Enclaves: Tropical Medicine in Colonial India* (Liverpool: Liverpool University Press, 2012); W. Anderson, *Colonial Pathologies: American Tropical Medicine, Race, and Hygiene in the Philippines* (Durham: Duke University Press, 2008); A. Bashford, *Imperial Hygiene: A Critical History of Colonialism, Nationalism and Public Health* (Basingstoke: Palgrave Macmillan, 2005); L. Manderson, *Sickness and the State: Health and Illness in Colonial Malaya, 1870–1940* (Cambridge: Cambridge University Press, 1996); S. Bhattacharya, M. Harrison, and M. Worboys, *Fractured States: Smallpox, Public Health and Vaccination Policy in British India, 1800–1947* (New Delhi: Orient Longman, 2005).

[31] See Chakrabarti, *Medicine and Empire*, 122–40 and 164–81; D. Neill, "Science and Civilizing Mission: Germans and the Transnational Community of Tropical Medicine," in Naranch/Eley (eds), *German Colonialism in a Global Age*, 74–92; Arnold, *Colonizing the Body*; Vaughan, *Curing their Ills*.

[32] L. Ratschiller, *Medical Missionaries and Colonial Knowledge in West Africa and Europe, 1885–1914: Purity, Health and Cleanliness* (Cham: Palgrave Macmillan, 2023); S. Mukherjee, *Gender, Medicine, and Society in Colonial India: Women's Healthcare in Nineteenth- and Early Twentieth-Century Bengal* (New Delhi: Oxford University Press, 2017); M. A. Osborne, *The Emergence of Tropical Medicine in France* (Chicago: University of Chicago Press, 2014); L. Ratschiller and S. Weichlin (eds): *Der Schwarze Körper als Missionsgebiet: Medizin, Ethnologie und Theologie in Afrika und Europa 1880–1960* (Köln: Böhlau Verlag, 2016); P. B. Mukharji, *Nationalizing the Body: The Medical Market, Print and Daktari Medicine* (London: Anthem Press, 2011); Digby/Ernst/Mukharji (eds), *Crossing Colonial Historiographies*; A. Digby and H. Sweet, "Nurses as Cultural Brokers in Twentieth-Century South Africa," in W. Ernst (ed), *Plural Medicine, Tradition and Modernity, 1800–2000* (London: Routledge, 2002), 113–29; J. Allman, "Making Mothers. Missionaries, Medical Officers and Women's Work in Colonial Asante, 1924–1945," *History Workshop* 38 (1994), 23–47.

potential to shed new light on the entangled, global, and hybrid nature of Dutch and German colonial medicine more broadly.

While an emerging body of literature has presented modern medical sciences as an inherently transnational and border-crossing enterprise, particularly with the rise of scientific internationalism in medicine after 1900,[33] historical scholarship on Dutch colonial medicine has largely remained confined to the Netherlands and the Dutch Empire.[34] Similarly, historians have mostly treated German colonial medicine as a self-contained field tied to the period of formal German colonial rule, overlooking its broader transimperial entanglements.[35] This neglect stands in stark contrast to the fact that, by the late nineteenth century, the German-speaking world had become a major global hub for the institutionalisation and specialisation of "modern" laboratory-based medicine, developments often associated with the emerging subdiscipline of bacteriology and its "father" Robert Koch.[36] Yet the colonial underpinnings of German laboratory science in general, and bacteriology in particular, have received only limited attention in historiography. While the rise of tropical medicine has long been understood as inseparable from the aggressive imperial expansion of the late nineteenth century,[37] historians have only

[33] See, for example, A. L. Foster, "Medicine to Drug: Opium's Transimperial Journey," in K. Hoganson, and J. Sexton (eds): *Crossing Empires: Taking U.S. History into Transimperial Terrain* (Durham: Duke University Press, 2020), 112–34; Neill, *Networks in Tropical Medicine*; B. M. Bennet, "Science and Empire: An Overview of the Historical Scholarship," in Bennet/Hodge (eds): *Science and Empire*, 3–29; Digby/Ernst/Mukharji, *Crossing Colonial Historiographies*.

[34] The body of research on colonial medicine in the Dutch East Indies is comparatively small. Recent publications include L. van Bergen, *The Dutch East Indies Red Cross, 1870–1950: On Humanitarianism and Colonialism* (New York: Lexington Books, 2019); H. Pols, *Nurturing Indonesia: Medicine and Decolonisation in the Dutch East Indies* (Cambridge: Cambridge University Press, 2018); L. van Bergen, *Uncertainty, Anxiety, Frugality. Dealing with Leprosy in the Dutch East Indies, 1816–1942* (Singapore: NUS Press, 2018); L. Hesselink, *Healers on the Colonial Market: Native Doctors and Midwives in the Dutch East Indies* (Leiden: KITLV Press, 2011). For a (slightly dated) overview of themes and perspectives in the Dutch East Indies' history of medicine, see G. M. van Heteren, A. De Knecht-van Eekelen, and M. J. D. Poulissen, (eds), *Dutch Medicine in the Malay Archipelago 1816–1942* (Amsterdam: Rodopi, 1989).

[35] For recent historiography of German colonial medicine, see for example M. Hedrich, *Bernhard Nocht: Der Organisator der deutschen Kolonialmedizin*, (Göttingen: Wallstein, 2024); W. Eckart, *Medizin und Kolonialimperialismus: Deutschland 1884–1945* (Paderborn: Schöningh, 1997); K. Wedekind, *Impfe und herrsche: Veterinärmedizinisches Wissen und Herrschaft im kolonialen Namibia 1887–1929* (Göttingen: Vandenhoeck & Ruprecht, 2021).

[36] See T. D. Brock, *Robert Koch: A Life in Medicine and Bacteriology* (Washington D.C.: ASM Press, 1999); A. Cunningham and P. Williams (eds), *The Laboratory Revolution in Medicine* (Cambridge: Cambridge University Press, 2002).

[37] See, for example, D. Neill, *Networks in Tropical Medicine: Internationalism, Colonialism, and the Rise of a Medical Specialty, 1890–1930* (Stanford: Stanford University Press, 2012); D. N. Livingstone, "Tropical Climate and Moral Hygiene: The Anatomy of a Victorian Debate," *The British Journal for the*

recently begun to explore how colonial contexts shaped bacteriological research, and even then, their analyses have largely remained confined to empire-centred frameworks.[38]

As various examples covered in this book demonstrate, German-speaking physicians in Dutch colonial service engaged actively with contemporary controversies in laboratory medicine, referring to their first-hand experiences, observations, and statistical or experimental data gathered throughout their colonial service. By tracing their multifaceted contributions to modern laboratory medicine, *Medical Mercenaries* provides the first comprehensive study of how Germanophone medical discourse shaped medical knowledge, policies, institutions, and practices in the Dutch East Indies and, conversely, how the Dutch East Indies became a crucial site of knowledge production for German-speaking researchers in the emerging microbiological sciences of the late nineteenth and early twentieth centuries.

It is important to note that the medical community described in this book cannot be understood as confined to the Dutch East Indies and Europe alone. Medical discourse in (and beyond) the Dutch East Indies included not only Europeans, but also Germanophone Japanese and, from the twentieth century onwards, European-trained Indonesian physicians. Adopting a transimperial perspective that, as defined by Nadin Heé and Daniel Hedinger, brings "different kinds of empires into one analytic field,"[39] this study rather traces the emergence of a loose network of German-speaking medical researchers at the turn of the twentieth century that connected regions in Central and Northern Europe with the Dutch Empire as well as with the Germanophile Japanese Meiji Empire. These connections, largely overlooked in existing historiography, were forged through German-language publications, congresses, and transimperial research collaborations that served as important precursors to scientific internationalism. Due to their embeddedness in transimperial medical networks, many colonial physicians who served the Dutch colonial military and civil health services would ultimately become important figures in the emerging international and public health movement of the twentieth

History of Science 32:1 (1999), 93–110; D. Arnold (ed), *Warm Climates and Western Medicine: The Emergence of Tropical Medicine, 1500–1900* (Amsterdam: Editions Rodopi B. V., 1996); S. Ehlers, *Europa und die Schlafkrankheit: Koloniale Seuchenbekämpfung, europäische Identität und moderne Medizin 1890–1950* (Göttingen: Vandenhoeck & Ruprecht, 2019); N. Bhattacharya, *Contagion and Enclaves: Tropical Medicine in Colonial India* (Liverpool: Liverpool University Press, 2012); A. Bashford, "'Is White Australia Possible?' Race, Colonialism and Tropical Medicine," *Ethnic and Racial Studies* 23:2 (2000), 248–71.

[38] See van Bergen, *Uncertainty, Anxiety, Frugality*; A. Velmet, *Pasteur's Empire: Bacteriology and Politics in France, its Colonies, and the World* (New York: Oxford University Press, 2020); P. Chakrabarti, *Bacteriology in British India: Laboratory Medicine and the Tropics* (Suffolk: Boydell & Brewer, 2012).

[39] D. Hedinger and N. Heé, "Transimperial History – Connectivity, Cooperation and Competition," *Journal of Modern European History* 14:4 (2018), 430.

century. Within this framework, "Dutch" or "German" medicine appears as a complex co-construction rather than the result of nationally isolated academic traditions that were deeply shaped by ideological currents of colonial culture.

Situating Colonial Physicians

Studying transimperial entanglements "through the lens of professional groups," such as physicians, offers distinct advantages.[40] The focus on the "global microhistory" of individual movements, trajectories, and careers *pars pro toto* for larger collectives allows scholars to respond to major critiques of global history, namely a tendency toward overgeneralisation, vagueness, or its abstract preoccupation with "connections." In other words, tracing the careers of individuals grounds concepts such as "network," "circulation," and "entanglement" in concrete historical evidence and ties it to concrete places and people.[41]

Historians have often described the professional trajectories of individuals across imperial contexts as "(trans)imperial careering."[42] Yet, by framing these careers primarily as pathways of opportunity, much of the scholarship has unintentionally reproduced diffusionist narratives that highlight Western expertise and present the mobility of experts as strategically planned success stories. More recent research, however, has drawn attention to the tensions and "frictions" that often shaped such careers.[43] Hence, while the focus on transimperial careering and mobility grounds global processes in lived experience, it also requires careful attention to complexity in order to avoid linear or triumphalist accounts of border-crossing careers.

[40] See J. L. Hennessey, "Preacher, Trader, Soldier, Spy: Studying Transimperial Individuals through their Occupational Roles," in Schär/Toivanen (eds), *Integration and Collaborative Imperialism*, 17–36.

[41] For a critique of the language of global history, see S. Gänger, "Circulation: Reflections on Circularity, Entity, and Liquidity in the Language of Global History," *Journal of Global History* 12:3 (2017), 303–18. For the potential of global microhistory in adding nuance to global history, see H. Fischer-Tiné, "Marrying Global History with South Asian History: Potential and Limits of Global Microhistory in a Regional Inflection," *Comparativ* 29:2 (2019), 52–77; M. Berg, "Introduction: Global Microhistory of the Local and the Global," *Journal of Early Modern History* 27:1/2 (2023), 1–5.

[42] See, for example, M. V. Veres, "Unravelling a Trans-Imperial Career: Michel Angelo de Blasco's Mapmaking Abilities in the Service of Vienna and Lisbon," *Itinerario* 38:2 (2014), 75–100; C. Mitchell, "Exploring Patronage, Genre, and Scholar-Bureaucracy: The Trans-Imperial Career of Ḥvāndamīr," *Entangled Religions* 13:5 (2022), online; M. von Brescius and C. Dejung, "The Plantation Gaze: Imperial Careering and Agronomic Knowledge between Europe and the Tropics," *Comparativ* 31:5/6 (2022), 572–90; D. Lambert and A. Lester (eds), *Colonial Lives Across the British Empire: Imperial Careering in the Long Nineteenth Century* (Cambridge: Cambridge University Press, 2006).

[43] See M. von Brescius, "Empires of Opportunity: German Naturalists in British India and the Frictions of Transnational Science," *Modern Asian Studies* 55:6 (2020), 1926–71.

To counter the risk of framing transimperial careers as linear stories of success and advancement, it is crucial to situate German-speaking physicians within their multiple, intersecting social contexts. First, their experiences exemplify how the rise of a "global bourgeoisie" was deeply entwined with empire,[44] while also revealing the often neglected gendered dimension of middle-class male mobility.[45] While historians of colonial medicine have fruitfully examined the exclusion of women and the medicalisation of marginalised bodies,[46] male physicians are still often portrayed as unmarked observers in a sense of what Donna Haraway called the "god trick."[47] Building on this, I argue that their positionality as European men fundamentally shaped their understandings of tropical environments and encounters with racialised and gendered others.

At the same time, medicine in the nineteenth century also often functioned as a pathway of upward mobility rather than an end in itself. Many German-speaking physicians entered Dutch colonial services less as part of a mission to disseminate the supposed blessings of European medicine than as a means of securing financial stability, bourgeois respectability, or to enhance their symbolic capital upon their return to Europe. This book uses the concept of *medical masculinities in the tropics* to capture how medicine became a powerful tool of masculine authority in colonial settings, while remaining unstable, relational, and fragile.[48]

Foregrounding medical masculinities also complicates narratives of male hegemony and scientific objectivity in late nineteenth- and early twentieth-century medicine more broadly. German-speaking physicians in the Dutch East Indies did not simply exert European medical superiority abroad; they were forced to navigate professional constraints, local resistance, and epistemic insecurities. They encountered previously unfamiliar diseases that destabilised their claims to the superiority

[44] See C. Dejung, D. Motadel, and J. Osterhammel (eds), *The Global Bourgeoisie: The Rise of the Middle Classes in the Age of Empire* (Princeton: Princeton University Press, 2019).

[45] For studies on masculinities and empire, see A. Wells, "Masculinity and its Other in Eighteenth-Century Racial Thought," in H. Ellis and J. Meyer (eds): *Masculinity and the Other: Historical Perspectives* (Newcastle upon Tyne: Cambridge Scholar Publishing, 2009), 85–114). For masculinity and science, see E. L. Milam and R. A. Nye, "An Introduction to Scientific Masculinities," *Osiris* 30:1 (2015), 1–14; H. Ellis, *Masculinity and Science in Britain, 1831–1918* (London: Palgrave Macmillan, 2017); D. Haraway, "Teddy Bear Patriarchy: Taxidermy in the Garden of Eden, New York City, 1908–1936," *Social Text* 11 (1984–1985), 20–64.

[46] See S. Mukherjee, *Gender, Medicine, and Society in Colonial India: Women's Healthcare in Nineteenth- and Early Twentieth-Century Bengal* (New Delhi: Oxford University Press, 2017); L. Schiebinger, *Nature's Body: Gender and the Making of Modern Science* (New Brunswick: Rutgers University Press, 2013).

[47] D. Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," *Feminist Studies* 14:3 (1988), 581.

[48] See W. Anderson, "The Trespass Speaks: White Masculinity and Colonial Breakdown," *The American Historical Review* 102:5 (1997), 1343–70.

of European knowledge, competed with local medical practitioners and metropolitan laboratory scientists, and faced severe scepticism from their patients. Such experiences expose the precarity of careers built on colonial service as well as the limits of supposedly universal European understandings of hegemonic masculinity.

Second, transimperial mobility was rarely autonomous; it typically depended on patronage, military protection, or employment within colonial institutions. "Colonial outsiders," in particular, often relied heavily on employment or collaboration with the institutions of formal colonial powers.[49] Alongside their social situatedness, *Medical Mercenaries* also situates colonial medical practitioners within the institutions that employed them, highlighting the often overlooked yet crucial role of colonial armies, hospitals, and plantations in shaping modern European medicine, particularly in the period following the so-called bacteriological revolution.

According to historian Warwick Anderson's, it was precisely the activities of medical practitioners in the colonial field that constituted "what is colonial about colonial medicine."[50] Following Anderson's observation, this book focuses on the lived experiences of practitioners in Dutch East Indies military and civil health institutions. Many blurred the line between physician and scientist: they treated European, Javanese, or Ambonese soldiers as well as Chinese or Javanese indentured labourers, while also conducting experiments on hospital patients and contributing to scientific debates in bacteriology and tropical medicine. Their proximity to patients also created space for acts of resistance and appropriation, complicating any view of European medicine as a one-directional imposition. Moving away from *theories* established in the European laboratories to medical *practices* in the colonies allows historians to challenge deterministic narratives that portray "advances" in bacteriology, parasitology, and tropical medicine at the turn of the twentieth century as a "revolution" that "proved" the universality and superiority of European medicine while replacing older theories that bound the spread of diseases to local conditions.[51] By focusing on practitioners in the colonial field, this book hence also seeks to blur the conventional distinction between theoretical, laboratory-based research and applied, field-based medical practice.

[49] See the contributions in Schär/Toivanen (eds), *Integration and Collaborative Imperialism*; C. L. Blaser, M. Ligtenberg, and J. Selander, "Introduction: Transimperial Webs of Knowledge at the Margins of Imperial Europe," *Comparativ* 31:5/6 (2022), 527–39.

[50] W. Anderson, "Review: Where is the Postcolonial History of Medicine?," *Bulletin of the History of Medicine* 72:3 (1998), 522–30. Also see Marks, "What is Colonial about Colonial Medicine?"

[51] See, for example, van Bergen, *Uncertainty, Anxiety, Frugality*; Velmet, *Pasteur's Empire*; Chakrabarti, *Bacteriology in British India*; M. Mann, "Kolonialismus in den Zeiten der Cholera: Zum Streit zwischen Robert Koch, Max Pettenkofer und James Cuningham über die Ursachen einer epidemischen Krankheit," *Comparativ* 15:5/6 (2017), 80–106.

Sources and Structure

Sources

Medical Mercenaries primarily relies on European sources, with archival research conducted in the Netherlands, Switzerland, Austria, and Germany. Research trips to Indonesia were prevented by the Covid-19 pandemic. Moreover, firsthand accounts from patients, many of whom were soldiers or indentured labourers and thus marginalised within colonised society, are scarce, even in Indonesian archives. In response to this potential Eurocentric bias, this study seeks to highlight instances where their contributions and resistance appear within European sources.

The main body of evidence consists of official administrative documents, reports, and correspondence from Dutch colonial institutions, supplemented by records from Swiss, Austrian, and German archives. These sources illuminate recruitment patterns, bureaucratic processes, and transimperial networks of German-speaking physicians in the Dutch East Indies. Additional material from the League of Nations archives in Geneva informs the book's concluding chapter on colonial medicine and international health. Newspaper archives from the Netherlands, Germany, Austria, and Switzerland were used to reconstruct the careers, travel, and biographies of individual physicians.

Scientific publications in Dutch and German-speaking medical journals provide crucial insights into colonial medical debates and the transimperial circulation of knowledge. Finally, the study draws on published memoirs and private papers of individual physicians, including Heinrich Erni, Heinrich Breitenstein, Friedrich Wilhelm Stammeshaus, Ernest Guglielminetti, and Bernhard Hagen. These sources reveal the everyday experiences, professional roles, and personal perspectives of Germanophone physicians in Dutch colonial service.

Chapter Outline

Rather than focusing on the biographies of a select few, particularly well documented individuals, the book is structured around three key sites of medical knowledge production in the Dutch East Indies following a loose chronological order: the military, the laboratory, and the plantation.

The first chapter outlines the broader transimperial markets for medical expertise that emerged throughout the nineteenth and early twentieth centuries. It highlights how Dutch demands for medical practitioners safeguarding the lives of European settlers and soldiers intersected with the aspirations of many medically trained, middle-class men from German-speaking regions in Switzerland, the German Empire, and Habsburg Austria to conform to (gendered) ideals of bourgeois

European society through colonial services. In turn, it demonstrates how the high esteem of the Germanophone educational system and linguistic compatibilities made physicians from these regions especially appealing to the Dutch Empire. The chapter also examines broader shifts in Dutch medical policies and their impact on the recruitment of foreign medical personnel. It shows how, for much of the nineteenth century, the Dutch Colonial Army served as the primary hub for medical and scientific knowledge production. However, as nationalist sentiments and competition grew at the turn of the twentieth century, the recruitment of foreign medical officers declined, while the emerging civil medical sector in the Dutch East Indies around 1900 created new opportunities (and obstacles) for Germanophone physicians. This shift in recruitment also marked a transition from official channels to more interpersonal ones.

The second chapter delves into the daily lives and encounters of German-speaking medical officers in the Dutch war against the Sultanate of Aceh in northwestern Sumatra in the 1870s and 1880s. Through an intersectional lens, the chapter examines how these medical mercenaries navigated their role as foreign, non-combatant, middle-class men serving the Dutch Colonial Army, highlighting their struggles to position themselves between the various social groups they encountered in the camps and *kampongs*. The chapter shows how they strategically leveraged their medical expertise and "outsider" position to claim hegemonic attributes of imperial masculinity – such as temperance, sexual restraint, and rationality – to distinguish themselves from both the colonised populations and the soldiers they served alongside. However, medical officers' encounters with Acehnese fighters, their incompetence in tackling diseases like beriberi and cholera, and their exposure to (highly popular) feminised indigenous medical traditions also showcase the fragility of their claims to hegemony.

The third chapter focuses on the ways in which physicians from Germanophone Europe employed with the KNIL assumed new roles in the 1880s and 1890s by conducting foundational research in the emerging fields of bacteriology and tropical medicine, partially on their own initiative, partially commissioned by the Dutch colonial government. The chapter demonstrates how they claimed epistemic authority and medical masculinity through their status as European practitioners in the colonies, which they portrayed as a significant advantage over their "armchair" colleagues confined to European laboratories. Rather than perpetuating a deterministic narrative of a "bacteriological revolution," the chapter reveals a complex relationship between older medical theories – linking disease spread to local conditions – and "modern" laboratory medicine connecting diseases to universally present pathogenic microorganisms. Moreover, applying Germanophoneness as a lens of analysis, the chapter illuminates the transimperial production of medical

knowledge from and about the Dutch East Indies between Germanophone Europe, the Dutch Empire, Meiji Japan, and the German Colonial Empire.

The fourth chapter finally shifts the attention from military to civil medicine, focusing on physicians trained in Germanophone Europe recruited by the privatised plantation hospitals in Sumatra in the context of the Dutch colonial government's "ethical turn" around 1900. German-speaking physicians played essential roles in institutionalising plantation hygiene, a medical subdiscipline that claimed to have significantly improved the health of thousands of Chinese and Javanese "coolie" workers. The chapter critically explores the biopolitical implications of these hygiene practices, highlighting how medical knowledge shaped racialised perceptions of the "fitness to labour" of Javanese and Chinese indentured labourers. At the same time, it points to the ways in which indentured labourers or indigenous medical practitioners resisted or appropriated European physicians' attempts to impose top-down health regimes, revealing the limits of biopolitical power and the internal stratification of colonised societies. Moreover, the chapter further examines how knowledge from Sumatra informed German colonial efforts in Africa and the Pacific, as well as how physicians leveraged the Sumatra experience to advance their careers in Europe. The final section gives a brief glimpse into the continuity of personnel within Sumatra's plantation hospitals and the League of Nations' malaria commissions, hinting at the colonial antecedents of the International Health Movement emerging in the mid-twentieth century.