

TIRYAQ IN THE TROPICS: TRADE AND THERAPEUTIC TRANSFORMATION IN THE 19TH CENTURY

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Abstract

This work will discuss the methods and effect of the dissemination throughout the Portuguese maritime colonial network of medicinal substances and healing techniques originating in India. Portuguese colonial agents (missionaries, colonial officials, marine commanders and state-licensed medical practitioners) accomplished this dissemination in the seventeenth and eighteenth centuries, when Indian medicine played a significant role in the state-sponsored health care institutions of the Portuguese colonies.

The presentation will focus particular analysis on consignments of medicines shipped from Goa, the administrative capital of the *Estado de Índia*, to such destinations as Macau, Timor, Mozambique, Brazil and Continental Portugal. Colonial officials generally sent such consignments to stock official colonial medical facilities. Further attention will be devoted to official reports about Indian medicines produced by colonial medical authorities in India at the request of the Portuguese Overseas Council in Lisbon, the royal body responsible for colonial administration. Such reports were an important conduit of information, not only to crown officials in the metropole, but also to medical officials in other parts of the empire. Such reports provide a telling gauge of the state of contemporary knowledge about certain medicinal substances from south Asia, and about what techniques were thought to be efficacious. I will demonstrate that Indian medicinal preparations and healing techniques became widely known in Portuguese-controlled enclaves in the Atlantic and Pacific Oceans, far from their indigenous roots, and were fully incorporated into the lexicon of tropical medicine in the Lusophone colonies.

Key-words: Tiryaq al-faruq; Indian medicinal preparations and healing techniques; East Indies

This brief paper outlines an encounter in the 19th century between British colonial anxieties over a medical condition considered typically tropical (beriberi), which was considered part of the disease landscape of the East Indies, and a medicinal commodity (tiryaq al-faruq), whose therapeutic identity and value became reconstituted through this encounter. In so doing it extends the insight of the ‘tropics’ as a zone of ‘otherness’ for European actors,¹ to reveal it as an arena in which processes of circulation (in this case concerning trade in medicinal substances and the transmission of texts) accelerated the re-evaluation of accepted knowledge, (in this case therapeutic). The ‘tropics’ then can be characterized for their distinctiveness from the perspective of European colonizers, as manifest in the identification of typically tropical clinical entities, as also for their ambiguity and porosity, enmeshed as they have been in transregional movements of people and things.

Tiryaq al-faruq is the Arabic term for a compound medicinal, characteristically composed of between 50 and 70 ingredients and attributed with great curative powers. Its aliases and variants were famed once throughout Eurasia as antidotes and panaceas. Tiryaq al-faruq and its aliases in European languages are derivatives of the original Greek *theriaka*. Theriaka in textual sources may date back to the 3rd or 4th centuries B.C.E., and is thought to have been composed primarily for the treatment of the bites of venomous animals.² The congruence of tiryaq al-faruq with the theriac of Andromachus, physician to the Emperor Nero, as described in Galen's work on Antidotes I, is especially notable. Andromachus had apparently introduced viper's flesh as a key ingredient, which remains in recipes for tiryaq al-faruq until at least the seventeenth century.³ The theriac of Andromachus, Venice theriac (a renowned centre of production from the 13th century), or simply theriac were the designations for this preparation from medieval times in European languages.

Much of the historical writing on theriac/tiryaq has focused on the trajectory of the drug in European spheres, narrowly conceived.⁴ These writings have pointed to the very high profile that theriac occupied as a therapeutic compound for a wide variety of ailments from the fifteenth to the eighteenth centuries, and some have pointed to the waning star of theriac as a therapeutic panacea in parts of Europe from the mid eighteenth century, notably in Britain. A signal moment in the fall of theriac in this historiography is the polemical tract, *Antitheriaca*, of the English physician William Heberden, published in 1745. Heberden argued strenuously against what he considered the false therapeutic claims regularly attributed to theriac, and the influence of the text and Heberden's supporters can be seen ultimately in the removal of theriac from the London Pharmacopoeia of 1788. Lack of formal recognition does not imply lack of use in clinical practice, but this act of discrediting can be seen as one key element in a longer process of delegitimation of expansive polypharmacy in Europe.⁵

The study of the production, use of and trade in theriac/tiryaq in Islamic and Asian realms within and beyond the medieval period is fragmentary.⁶ Yet it is precisely the longevity of trade and use in tiryaq, beyond Europe and the eastern Mediterranean, which provides the context for the reconstitution of its therapeutic value through colonial contact.

European imperial expansion through the Indies from the early 16th century brought Europeans into contact with new disease environments. Cholera, whose first notable eruption in epidemic form, as recorded by Europeans, is the Jessore epidemic of 1817,⁷ is perhaps the preeminent affliction that became strongly associated with Asia. Another set of eminently tropical ailments were referred to variously as barbiers / beriberi / ber(e)bere in Portuguese,

Dutch, English, Danish and French documentation from the 16th century. These were considered to be most common in southern and eastern parts of the Indian subcontinent, Ceylon and the archipelagos of the East Indies. Europeans collectivized and defined these conditions symptomatically; characteristic symptoms were severe debility and the presence of oedemas and paralysis. There was, however, much variance in the description of these ailments, to the extent that some authors considered *barbiers* distinct from *beriberi*, for instance, while others were convinced they were synonymous. Chroniclers from Diogo do Couto on noted the swift fatality that a case of ‘*berbere*’ could bring about.⁸ Cases were noted through to the 19th century especially among seagoing crews, forced labourers, jail populations as well as in the general populace, and as some noted, in particular the ‘lower classes’.

As European personnel (primarily medics in the military) in the Indies grappled to determine the contours of a disease whose possible causes and treatments confounded them, some took note of a ‘native remedy’ in circulation on the east coast of India in the first decades of the 19th century.⁹ Local Indian physicians (*hakims*) in the vicinity of the port of Masulipatnam apparently used it to great effect for the treatment of the characteristic paralytic and oedematous symptoms of *beriberi*, and its use became taken up by British doctors in the region. One of these *hakims* had apparently become renowned for the treatment of the condition, known locally in Urdu as *seet*. Masulipatnam was formerly the port of the Shiite rulers of Golconda, of the Qutb Shahi dynasty. By the early 19th century this dynasty had been eclipsed by the Nizams of Hyderabad of the Asaf Jah dynasty, who had ceded the territory surrounding Masulipatnam to the British. The port, meanwhile, had nearly been destroyed in 1800 by a cyclone, yet evidently was still functioning in its aftermath.

The researches of a British military surgeon stationed in this locality, John Grant Malcolmson, determined that this locally celebrated remedy, ‘*treak faruq*’, was in fact a commercial product of a pharmacy located in Venice, and that it was traded through Arab and ‘Mughal’ trading networks to India’s east coast.¹⁰ The product brochures which he consulted bore the name *Theriac of Andromachus* in Italian, in addition to the Arabic-Turkish lettering which he transliterated as ‘*treak faruk*’. Malcolmson described his own researches into *treak faruq*, and collated those of other European medical personnel, in an essay on *beriberi* that won a prize from the Madras Medical Board and subsequently became rapidly and widely circulated through scientific networks, with summaries and references to it appearing in numerous journals in the US, France and Germany shortly after its publication.

Malcolmson was aware that this treeak faruq / theriac of Andromachus came under the same category of polypharmaceutical theriacs that Heberden sought to expunge, yet his researches did not extend into the depths of treeak faruk's reputation in India, in the Galenic-inspired healing traditions transmitted in the subcontinent primarily through Persian and Urdu. He thought that this product was a new commodity to the region. A range of medical manuscripts and other documentation in Persian point to the presence of theriacs known about and in use from the 16th century, at least. The Chaghatay Turkic founder of the Mughal Empire in India, Babur (1483-1531), used tiryaaq al-faruq to treat an attempt to take his life by poisoning.¹¹ Reference to tiryaaq (al-faruq) occurs not only in the chronicles of ruling dynasties, but is found in poetic and religious works up to the 20th century. Such was the power of tiryaaq's fame that its medicinal qualities extended into domains beyond the medical, in which ridding poison (societal, moral) could be invoked.

The embeddedness of tiryaaq in transregional contexts is evident in the lines of transmission that connect Venetian pharmacy in multiple ways to Arabic theory and practice of antidotes. Firstly, we can point to Venice's position as a leading European entrepot for the spice trade into the 16th century (when it becomes usurped by Portuguese and then Dutch enterprise). Second, we can point to the Latinized Arabic textual knowledge on antidotes, which, according to the work of Marianne Stössl, underpinned the knowledge of theriacs in Venice.¹² Third, we can point to the contacts between Venice and Ottoman Cairo in the late 15th century, a famed centre for the production of theriac. The Venetian botanist Prospero Alpino spent three years in Cairo in the 1490s and made a point of mentioning how he acquired the recipe for tiryaaq al-faruq from the Cairenes.¹³

We have then a connected history linking this famed drug with Arabic learning, centres of production in the Eastern Mediterranean, transregional trade and then colonial contact with a renowned therapeutic agent for a troublesome debilitating disease. As a result of this contact, in the process of circulation, Malcolmson's treeak faruk became revived as a potentially useful therapeutic agent. Experimentation with treeak faruk was conducted in Calcutta in the 1830s and reports on beriberi in a variety of languages until the last decades of the nineteenth century cite Malcolmson, and treeak faruq as a specific for beriberi. In these renderings treeak faruk is no longer a panacea or an antidote, rather its therapeutic value is entirely constructed through its new association with beriberi. When the dietary cause of beriberi began to be seriously researched, from the 1880s, therapeutics shifted to changes in dietary regimes, and milled white rice diets became implicated in the causation of beriberi. This process culminated with the determination in the 1920s of beriberi as a deficiency

disease,¹⁴ then we can see the termination of tiryaq's reductive status as a tropical therapeutic. These tiryaq/theriac stories challenge us to understand the constitution of the tropical within a history of circulation and entanglement between peoples, substances and places.

¹ David Arnold, 'Introduction' in David Arnold (ed.) *Warm Climates and Western Medicine: The Emergence of Tropical Medicine, 1500-1900* (Amsterdam: Rodopi, 1996), p. 6.

² Gilbert Watson, *Theriac and Mithridatium: A Study in Therapeutics* (London: Wellcome Historical Medical Library, 1966).

³ The Turkish traveller, Evliya Chelebi, described the process of producing tiryaq al-faruq in 17th century Egypt, and the capture and preparation of venomous snakes, in his travelogue the *Siyahatname*. The following article provides a translation of the section of Chelebi's work that deals with medicine: Gary Leiser and Michael Dols, 'Evliyā Chelebi's Description of Medicine in Seventeenth-Century Egypt' *Sudhoffs Archiv* 72 (1) 1988: 55 ff.

⁴ Watson Theriac, Patrizia Catellani and Renzo Console, 'The Rise and Fall of Mithridatium and Theriac in Pharmaceutical Texts' *Pharmaceutical Historian* 37 (1) 2007: 2-9; J.P. Griffin, 'Venetian treacle and the foundation of medicines regulation' *British Journal of Clinical Pharmacology* 58 (3) 2004: 317-325. Dusanka Parojcic, Dragan Stupar and Milica Mirica, 'La Thériaque: Médicament et Antidote' *Vesalius* 9 (1) 2003: 28 – 32. J. Hacard, *La Thériaque* (Paris, Le Francois, 1947).

⁵ Notably, however, pharmacopoeia in France and Germany maintained the place of theriac until the mid and late 19th century. A. Berman, 'The persistence of theriac in France' *Pharmacy in History* 12 1970: 5-12. It was still possible to procure theriac from Venice's most famous theriac pharmacy, Alla testa d'Oro, in the 1960s, though production had stopped in the 1930s: Henry Vollam Morton, *A Traveller in Italy: With Photographs [...]* (London: Dodd, Mead, 1964), pp. 388-392.

⁶ Dietrich Brandenburg, 'Theriaca – Pharmacology of the European and Oriental Middle Ages' *Medizinische Welt* 33 (33) 1982: 1137-1140; Zohar Amar, 'The export of theriac from the Land of Israel and its uses in the Middle Ages' *Korot* 12 1996: 16-28 (Hebrew). Joëlle Ricordel, 'Ibn Djuldjul : Propos sur la thériaque' , *Revue d'Histoire de la Pharmacie* 48 (325): 73-80; idem., 'Le traité sur la thériaque d'Ibn Rushd (Averroes),' *Revue d'Histoire de la Pharmacie* 48 (325): 81-90.

⁷ David Arnold, *Colonizing the Body: State Medicine in Nineteenth-Century India* (Berkeley: University of California Press, 1993), though the first descriptions in European texts of ailments correlated with cholera appear in the Portuguese works of Gaspar Correia and Garcia da Orta, *Colóquios dos simples e drogas e cousas medicinais da India [...]* (Goa, 1563), Reprodução fac-similada (Lisboa: Academia das Ciências de Lisboa, 1963), Colóquio 17.

⁸ Diogo do Couto, *Decadas viii 1568*, ch 25.

⁹ J. G Malcolmson, *A Practical Essay on the History and Treatment of Beriberi* (Madras: Vepery Mission Press, 1835).

¹⁰ J. G Malcolmson, *Beriberi*, p. 296.

¹¹ Babur, *Baburnama*, trans Annette Beveridge (Lahore: Sang-e-Meel Publications, 2002), p. 543.

¹² Marianne Stössl, *Lo spettacolo della triaca. Produzione e promozione della 'droga divina' a Venezia dal Cinque al Settecento*, (Venice, 1983).

¹³ Watson, *Theriac*, p. 108.

¹⁴ K. Codell Carter, 'The germ theory, beriberi and the deficiency theory of disease' *Medical History* 1977 21:119-136; Kenneth Carpenter, *Beriberi, White Rice and Vitamin B: A Disease, a Cause, and a Cure* (Berkeley: University of California Press, 2000).