Premodern Island-Southeast-Asian History in the Digital Age

Opportunities and Challenges through Chinese Textual Database Research

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Abstract

Premodern Southeast Asian history has primarily been predicated upon the exploitation of Chinese written documents. Reliance has been placed on several texts that detail Southeast Asian polities, products, and their respective societies. As indigenously generated sources of data have become available, primarily through archaeology, the trend has been to seek convergence between these two bodies of information. The availability of searchable digital databases has rendered Chinese documents to be open to the discoveries of new information previously unknown to historians of premodern Southeast Asia. This unutilized information has the potential of throwing new light on previously held conclusions. This article seeks to make an argument for the exploitation and potential of digitized Chinese textual databases, through keyword search methodologies, in expanding our understanding of Southeast Asia's past, as well as the potential challenges that need to be addressed so that this new source base can be made sufficiently utilizable for Southeast Asian studies.

Keywords

Chinese digital databases – premodern Southeast Asia – textual research – textual digitization – keyword search methodologies – China-Southeast Asia interactions

1 Introduction

The study of premodern Southeast Asian history brings with it several unique challenges for the historian. Particularly in the case of Island Southeast Asia the nature of the environment, with its riparian surroundings and coastal situation, and the general absence of large swaths of arable land for the production of cereal crops, have historically led to the creation of societies that are largely devoid of an agrarian economic and socio-political base. More importantly, the region's location in a maritime environment between the Indian Ocean and the South China Sea has enabled the societies located here to engage with the international arena, thereby developing the factors needed to generate more complex and viable socio-political structures in the long term.

From this logic of external interaction, a varied number of aspects of life in Island Southeast Asia may be enumerated. Trade was made possible and was clearly of paramount importance. It provided a means of communication and interaction, both outwardly, with external entities in the region—among others, the Indian subcontinent, Mainland Southeast Asia and northeast Asia—as well as internally, with the inland and highland areas of the islands on which the coastal societies of Island Southeast Asia lived. Along with that, diplomacy, with the agendas for conducting external relations, which inevitably led to the incurring of substantial costs, resulted in strategies that were developed to ensure that the interactions yielded maximum benefits. The competition for regional resources and access to international markets, along with the difference in wealth effects on the various coastal societies, led to key state-formational processes and regional geopolitical developments being articulated in tandem with changes in the nature of trade and diplomacy. These included the development of spheres of influence in Island Southeast Asia that overlapped or interacted with each other over time. Such confluences of political and economic spheres in turn had a significant impact on the fluidity of the social culture, mobility, and membership of the people of this region. Finally, with such developments came the evolution of the material culture, reflecting important shifts in the region's consumption patterns, artistic inclinations, and technological developments (or lack thereof) that accompanied or facilitated these interactions.

All of that is to say that the external world influences our understanding of Island Southeast Asia, particularly its coastal societies. In surveying the scholarly literature of this region's premodern history, it is clear that the primacy of the external world has hitherto in fact been clearly understood. Up until the 1980s, this imperative was articulated in the works published by the major scholarly journals of the field. The most prominent were those by such sem-

inal scholars as George Coédès, Paul Wheatley and O.W. Wolters (Wolters 1967; Wheatley 1973; Coédès and Vella 1968). While substantial art materials and architectural remains were relied upon to articulate the external linkages and influences on Southeast Asian societies, the main sources of information from which data had been obtained to construct the history of premodern Southeast Asia were a corpora of textual materials external to the region itself. These included Chinese, South Asian, Middle Eastern, and Near Eastern textual sources, both in codex as well as epigraphic forms. In other words, foreign texts formed the bedrock upon which this history was supplemented by the much smaller, and in certain historical periods fragmentary or absent, corpus of indigenous textual records.

In building the foundational knowledge we now possess of premodern Island Southeast Asian history, the fundamental role of Chinese written documents cannot be denied. This body of texts provides detailed information on a wide range of topics, and often remains the only source of information on specific polities and groups of the region. These include the histories of such key states as Funan, Srivijaya, and Champa, as well as secondary polities such as Tambralingga, Borneo, Temasik, Lambri, and Kedah, to name but a few.

By the 1980s, however, the exploitation and viability of the corpus of Chinese texts for the substantive production of new information appeared to have run its course. Since then, relatively little new ground has been broken through the use of Chinese documentary information. This is despite the fact that massive advancements in information technology have taken place since the end of the twentieth century. The body of texts, and the research methodologies applied to them, have remained relatively static throughout this time.

The present article seeks to make an argument for the exploitation of the digitization of Chinese textual databases through keyword search methodologies as a means of conducting data-trawling to aggregate information on specific topics pertaining to premodern Southeast Asian history. It will also explore the potential that such methods hold in expanding our understanding of Southeast Asia's past. In what follows, the article will seek to illustrate, through three case studies, the potential outcomes of the recent digitization process for Southeast Asian studies, as well as the potential challenges that need to be addressed in order to enable this new source base to be sufficiently viable in the field of Southeast Asian studies.

2 Sources of Information for Premodern Southeast Asian History in the Late Twentieth and Early Twenty-First Century

Since the 1970s, the movement within Southeast Asian studies to pursue the validity of autonomous histories, as well as the need to distinguish Southeast Asian studies as a coherent academic field in its own right, has witnessed the dichotomization of the data sources of premodern history into the indigenous and non-indigenous. Within this academic logic, the progressive downplay of external sources was accompanied by a concerted push to argue for the viability of known indigenous sources of information that had hitherto been regarded as too nebulous to be of much use (Wolters 1970, 1982). More importantly, the generation of new indigenous sources of data that had hitherto not been made available to scholars began in earnest. The push, beginning with the SPAFA SEAMEO projects from 1979, led to the production of a large collection of anthropological data through which the premodern history of Island Southeast Asia could be reassessed in light of 'indigenous' information (Smail 1961).¹ These included archaeological data from land settlement sites and shipwrecks; the preservation and classification of excavated materials, such as ceramics and metal ware; the preservation of material cultural practices and intangible cultural heritage, including knowledge of the production of woven objects (basketry) and textiles; and the further development of research capacities for the further generation of such data within Southeast Asia.²

These efforts were augmented by the focus of such institutions of higher learning in the US and Asia that had robust Southeast Asian studies programmes to frame the analytical paradigms of premodern Southeast Asian history from the perspective of the region. This was particularly evident in the case of the University of Michigan and its series titled Michigan Papers on South and Southeast Asia, Yale University and its series titled Yale University Southeast Asia Studies Monograph Series, and Cornell University's Southeast Asia Working Paper Series, as well as the Institute of Southeast Asian Studies' (Singapore) publications with a strong focus on Southeast Asian historical topics. At the same time, scholarship on premodern Southeast Asia began to systematically exploit indigenous textual materials and oral traditions through the extraction

¹ <http://www.seameo-spafa.org> (accessed 28-2-2013).

² SPAFA Workshop on Research on Srivijaya 1979; Consultative Workshop on Archaeological and Environmental Studies on Srivijaya (1-W2A) 1982; Technical Workshop on Ceramics (T-W4) 1985; Consultative Workshop on Research on Maritime Shipping and Trade Networks in Southeast Asia (1-W7) 1986.

of key concepts elucidated from such sources, almost all of which date after the period in question, and extrapolating them into the past (Manguin 1986; Andaya 2008).

In such a context, external textual sources of information, in particular Chinese texts, increasingly played a secondary role in premodern Island Southeast Asian historical scholarship. This has been exacerbated by the translation of only several key Chinese texts with substantial information on Southeast Asia into English. These include the *Lingwai daida* 嶺外代答 (*Notes from the Lands Beyond the Passes*, 1178); *Zhufanzhi* 諸蕃志 (*Description of the Various Foreigners*, 1225); *Daoyi zhilue* 島夷志略 (*A Brief Description of the Island Barbarians*, 1349); *Xingcha shenglan* 星槎勝覽 (*Overall Survey of the Star Raft*, 1436); *Yingya shenglan* 瀛涯勝覽 (*Overall Survey of the Oceans' Shores*, 1416); and the *Mingshilu* 明實錄 (*Veritable Records of the Ming dynasty*, 14th–17th c. AD).³

While these translations have had the beneficial effect of enabling scholars to situate recently generated indigenous data within a historical context, it may, unfortunately, be fairly safe to state that little substantive, new scholarship on premodern Southeast Asia has been generated through the analysis of Chinese textual material during the 1980s. It is no accident that the impetus to develop a more intimate knowledge of Chinese source materials in this field has declined significantly over the course of the last three decades.

By the 1990s, however, there was a resurgence in the use of Chinese texts for the study of premodern Island Southeast Asia. This resurgence came not from Southeast Asianists, but from Sinologists. A series of scholarly works and academic workshops on southern coastal China's maritime history, initially centred on the historical port-city of Quanzhou in Fujian Province, spurred on by the opening of the maritime museum of Quanzhou featuring a thirteenth-century Chinese shipwreck that was excavated in 1972 (Quanzhouwan songdai haichuan fajue baogao bianxiezhu 1975), led to Sinological interests in China's overseas trade during Quanzhou's heyday as an international port, roughly corresponding to the eleventh to fifteenth centuries. These included the Chinese trade routes to Sumatra and Java as well as to the Philippines and the Sulu Sea area, key products that the Chinese were importing from Maritime Asia, and the economic production of the coastal Chinese hinterland that was geared towards the Southeast Asian market (Quanzhou International Seminar on China and the Maritime Routes of the Silk Roads Organization Committee 1991; Ptak 2004; Schottenhammer 2001). More recently, the discovery and recovery of the Nanhai 1 wreck, a late Song-period Chinese wreck from the Pearl River

3 Hirth and Rockhill 1966; Rockhill 1914 and 1915; Ptak 1996; Mills 1970; Wade 2013.

Delta in Guangdong Province, has led to the development of the Maritime Silk Road Museum (Yangjiang, Guangdong Province). At the same time, the publication of the journal series *Haiyangshi yanjiu* 海洋史研究 (Journal of maritime history), started in 2009, and the *Haijiaoshi yanjiu* 海交史研究 (Maritime history studies), started in 1978, witnessed a growth in scholarship on the history of China's maritime relations with Southeast Asia over the last two millennia.

Several key texts pertinent to premodern Sino-Southeast Asian interactions have been identified as a result of these scholarly efforts, namely, the *Xintangshu* 新唐书 (New record of the Tang dynasty, 1060); *Pingzhou ketan* 萍州可谈 (Conversations in Pingzhou, 1116); *Wenxian tongkao* 文獻通考 (Comprehensive examination of literature, 1317); *Songshi* 宋史 (History of the Song dynasty, 1346); *Yuanshi* 元史 (History of the Yuan dynasty, 1370); *Yijianzhi* 夷堅志 (Descriptions by Yijian, 1161); *Dade nanhaizhi* 大德南海志 (Description of the southern seas during the reign of Dade, 1307); and *Songhuiyao jigao* 宋會要輯稿 (Collected documents of the Song dynasty, c. 19th century). Whereas previous Southeast Asian scholarship had relied primarily on geographical treatises and supplemented these with certain historical encyclopaedias, three other genres of texts were brought to the fore by the Sinological studies of the 1990s. These were the miscellaneous jottings (*biji* 笔记), the chronological record of edicts (*huiyao* 會要), and the geographical gazetteers (*difangzhi* 地方志).

To be sure, the importance of these genres of texts to Southeast Asian history had already been alluded to by earlier scholars. Kuwabara Jujitsu, in 1928, penned a substantial article on the international port trade of China during the Tang (618–907) and Song (960–1278) periods published in *Toyo Bunko Research Department Memoirs*, in which he masterfully demonstrated the critical role that texts of these genres played in explicating the role of maritime Asian foreigners in China's port cities during the tenth to thirteenth centuries (Kuwabara 1928). By the 1980s, a number of important compilations, based on geographical data from the Chinese textual corpus, had also been produced in the Chinese language. Amongst these was a dictionary of historical Maritime Asian place names found in Chinese historical texts, with references to their location in the Chinese texts, and annotations drawn from secondary literature in Chinese, Japanese, and European scholarship (Chen 1986).

Together, these scholarly works brought to the fore two important issues that have direct relevance to historians of premodern Island Southeast Asia. Firstly, the works illustrate that Southeast Asia's past was much more nuanced than has been hitherto portrayed. In particular, Southeast Asia's experiences appear to have been much more amorphous and closely linked to such external entities as China than had previously been assumed. Secondly, these works

highlighted the potential of a much larger body of textual materials that have yet to be exploited by Southeast Asianists for the purpose of reassessing and reconstructing the historical narrative that has hitherto been developed.

The need for Southeast Asianists to re-engage with these genres of texts, and their general absence in Southeast Asian studies, had already been forcefully argued by O.W. Wolters in the 1980s (Wolters 1983, 1986). More pertinent to Southeast Asian history, however, was Wolters's recognition of the field's reliance on Sinologists to trawl through the corpus of Chinese texts on their behalf, and thereafter to articulate the results of that laborious process in ways that would be accessible and relevant to Southeast Asianists. As a case in point, Wolters made specific mention of Gu Hai, a scholar based at Xiamen University in the 1980s, who was compiling an annotated bibliography of texts from the aforementioned genres dated from the Han to Qing periods that contained information on Southeast Asia. This bibliography was subsequently published in 1990, but it has remained inaccessible to Southeast Asianists because it was published in Chinese (Gu 1990).

The problem of accessing Chinese historical texts that may contain information on Southeast Asia lies not just in the language skill set needed to unlock them as a source base. Equally important are the skills needed to identify the relevant data that are essentially Sinocentric in narrative tone, and to situate those data within the premise of Southeast Asian studies. As a case in point, the *Songhuiyao jigao*, a text belonging to the genre of chronological records of edicts, is a compilation of the edicts and regulations issued by the Song court, the memorials submitted by its governmental officials in response to these regulations and edicts, and the actions taken by its bureaucracy.⁴ Organized into several sections pertaining to different aspects of governmental administration, the challenge hitherto in using this text has been to locate the bits of information related to Southeast Asia, which are scattered across large sections of the text, the aggregate of which provides substantial amounts of information that shed new light on the diplomatic and commercial strategies of Southeast Asian polities with regard to their interactions with China; the context of the development in different types of products between China and Southeast Asia; and the factors that resulted in the evolution of the nature of shipping in Maritime Asia and Southeast Asian waters in particular.

Usage of the *Songhuiyao* in Southeast Asian scholarship has hitherto been confined to Chapter 44 of the section on economic governance, and chapters

4 Xu Song 徐宋 (1957), *Songhuiyao jigao* 宋會要輯稿. (Beijing: Zhonghua shuju bianjiaobu, 1957).

4, 7, and 9 of the section on foreigners and foreign states (lit. Treatise on foreign barbarians).⁵ The annotated bibliographies of the *Songhuiyao*, compiled by Sinologists, have made these chapters the obvious places for Southeast Asianists to explore. However, it is highly likely that many more bits of information relevant to Southeast Asia are scattered throughout the text. Yet, in the absence of any method of searching through the text in an efficient and productive way, it is uncertain how such information may cost-effectively be procured.

This state of affairs is reflective of the challenges Southeast Asianists face in attempting to engage with the corpus of Chinese texts. While a number of the texts may be as coherently organized as the *Songhuiyao*, the reality is that the vast majority of Chinese texts are much shorter, more limited in the scope of their content, less organized or coherent, and more fragmentary than these more comprehensive documents. The challenges faced by Southeast Asianists in engaging with the *Songhuiyao* as a source of information may therefore be extrapolated to any research utilizing the full corpus of Chinese textual sources. The uncertainty of research outcomes has inevitably led to a concentration on more certain and viable sources of data, while the vast majority of Chinese texts have remained neglected. This state of affairs has been reflected, in recent years, in the latching on to key portions of recently emergent texts such as the *Xintangshu*, *Pingzhou ketan*, *Wenxian tongkao*, *Songshi*, *Yuanshi*, *Yuandingzhang*, and *Dade nanhaizhi*, in which sizeable chunks of information pertaining to Southeast Asia have been identified.⁶

More recently, a number of developments, particularly in the field of information technology, have begun to offer the possibility of overturning this state of affairs. The *Siku quanshu* 四库全书 (Complete library of the four treasures, 1782), commissioned by Emperor Qianlong of the Qing dynasty and completed in 1782, and containing 3,461 titles, in 36,381 volumes and 79,000 chapters, is a compendium encompassing texts from the Eastern Zhou period to the first half of the Qing dynasty (770 BC–18th century AD). It is one of the largest corpora of Chinese texts presently available for the study of the history of premodern East Asia. Since the late 1990s, the *Siku quanshu* has been systematically digitized. A number of digital versions are presently available, but the present article will focus its attention on the *Wenyuange* edition.⁷ The electronic database has been rendered from print form into both digital photographic format as well as digital characters. All texts are classified according to their traditional classifica-

5 Xu Song, *Songhuiyao jigao*, zhiguan 44; Fanyi 4, 7 and 9.

6 Mair and Kelley 2015; Heng 2009; Masashi 2009; Wade and Sun 2010; Cooke, Li and Anderson 2011; Hall 2011.

7 <http://www.sikuquanshu.com/main.aspx?lang=en> (accessed 28-2-2013).

ation categories in the original catalogue of the *Siku quanshu*, and attributed to their respective dynastic periods in Chinese history. The former, similar to other archival digitization processes, simply enables a larger audience to gain remote access to the textual corpus. The latter, on the other hand, has created a platform upon which new methodologies for research can be tested. Character digitization has enabled keyword searches to be executed across the entire body of texts.

Similar digitization projects, including the digitization of the *Songhuiyao jigao* undertaken by the Harvard East Asian Studies Program in collaboration with Academia Sinica,⁸ are paving the way for new search methodologies to be developed in the field of textual research. As more bodies of Chinese textual documents are formatted in such digital character renditions, it will become imperative for Southeast Asianists to develop research capabilities to exploit this new source base.

What follows are two keyword search approaches that could be utilized by historians to extract data from the digital databases, the kinds of information that such approaches could yield, and the challenges that historians would face as a result of such search methodologies.

3 Keyword Searches of Island Southeast Asian Products

At the simplest level, keyword searches can broaden the body of data from the Chinese textual corpus presently available to historians of Southeast Asia. This can be illustrated through the example of the study of Southeast Asian camphor. While a number of short studies have been available for some time, what we know of Southeast Asia's trade in camphor has largely been based on the seminal work by O.W. Wolters (Wolters 1967). More recently, R.A. Donkin has written a monograph outlining the general historical discussions of the harvest, use, and taxonomy of the various types of camphor, particularly in the East Asian and Southeast Asian contexts (Donkin 1999). Both studies suggest that Southeast Asia's export of camphor to China began in the seventh century with the introduction of camphor into the Chinese market, riding on the back of the frankincense and benzoin trade that originated from the western Indian Ocean. This trade was initially carried out by Persian traders, and subsequently by Arab traders as they travelled through Maritime Southeast Asia en route to China. Details of this trade are not known, except that it played a role in the

⁸ <http://www.songyuan.org> (accessed 28-2-2013).

tribute or state-level exchanges from the sixth century AD, and that camphor remained critical to the trade between China and the Melaka Straits region up to the thirteenth century. In effect the trade in camphor had remained relatively static or unchanged over seven centuries.

Information that may be gleaned from the emergent Chinese texts available to Southeast Asianists since the 1990s provides a much more complex picture. In essence, our knowledge of the camphor trade may be augmented as follows: by the late tenth century, Champa and the Dashi Arabs were the main purveyors of this product to China. Between 1011 and 1070, there was an absence of camphor as a tribute item presented to the Chinese court, but the presentation resumed after 1070, by which time Srivijaya became one of the purveyors of this product as well. In 1078, camphor oil featured as a tribute item presented by Srivijaya to the Chinese court. The next bit of information comes in the early thirteenth century, during which time camphor was no longer a tribute item, and small pieces of the product had become the mainstay of the trade. The Southeast Asian polities that were the key purveyors of camphor as recently as the twelfth century were no longer noted to be the sources of this product by the fourteenth century. Instead, the product was now made available by numerous small ports along the east coast of the Malay Peninsula and North Sumatra. By the fifteenth century, Southeast Asian trade in camphor appears to have come to a complete stop (Heng 2015).

Two points may be noted here. Firstly, the textual data tell of the rise in the trade in camphor by the tenth century. The trade reached a peak in the late eleventh to early twelfth centuries, followed by a prolonged decline into the fourteenth century. This narrative is fairly different from that which has been developed as the result of work done by such scholars as Paul Wheatley, Wolters, and Donkin. Secondly, the chronology of the camphor trade as outlined by the aggregate of information from the emergent Chinese texts only lends itself to hypothetical postulations with regards to their circumstances, factors, and the effects that it had on Southeast Asia and China, unless the developments can be situated within the larger context of China and Southeast Asia over the seven centuries in question.

A keyword search run on the *Wenyangu siku quanshu* using the character for camphor (*nao* 腦) yields an interesting set of data that may be used to reassess the narrative we presently have. A total of 3,429 hits, located in 1,168 volumes, may be noted, of which a significant number of these texts date to before the fifteenth century. Figure 1 provides more detailed information on the statistics of the search results.

Several points about the textual data and the camphor trade may be elucidated. Firstly, the correlation between the number of hits in the texts, and the

FIGURE 1 Distribution of Chinese texts containing mention of ‘camphor’

dates of the texts themselves, present an interesting pattern. While mention of the camphor tree (樟, *Lauraceae* family), a plant native to the sub-tropical zone of China, occurs as early as the Warring States period (495–221 BC), there is relatively little information on camphor resin (*dryobalanops aromatica*) in the Chinese textual corpus prior to the Tang dynasty. A small handful of texts date to the Tang period, while the majority of the texts, for the period on which this article focuses, date to the Song period. Furthermore, putting aside the official histories, in which mention of camphor is linked almost exclusively to tribute exchanges, the majority of the texts fall under the genre of miscellaneous texts, and in particular medicinal manuals.

Secondly, these texts highlighted by the keyword search show a developmental trajectory of the use of camphor in China. The references from the Tang period exhibit a general absence of specific knowledge of the application of camphor in Chinese medical practice. In certain texts, camphor was regarded as belonging to the same group of aromatics as gharuwood incense, musk, cloves, sandalwood incense, liquid storax, and rhinoceros horn. In terms of use, camphor, along with other exotic products, was to be ground down and mixed (with no proportions specified), and to be made into pills for the purpose of treating mental disorders that resulted from spirit encounters.⁹ In fact,

9 Wang Tao 王焘 (2007), *Waitai miyaofang* 外台秘要方 (Arcane medical essentials from the Imperial Library, n.d.), p. 752, in: 文渊阁四库全书电子版 Wenyuange shikuquanshu dianziban, 13:53b and 54a. Hong Kong: Digital Heritage Publishing.

the only deliberate mention of camphor in the Tang texts is as an ingredient for concocting an eyewash.¹⁰

While the intricacies of Chinese medicinal and ritual practices may not be of interest to Southeast Asianists, the textual information indicates that the knowledge and use of camphor by the Chinese was still in its infancy during the Tang dynasty, in direct contradiction to Wolters's conclusions (Wolters 1967:233). Nor did this situation change through the course of the tenth and early eleventh centuries, when an increase in the presentation of camphor as a tribute item may be noted from the Chinese records of that period. No corresponding increase in information on the knowledge and use of camphor in such areas as medicinal or ritual practices may be noted.

This state of affairs appears to have changed from the late eleventh century onwards, when a much larger body of texts with more specific references to the use of camphor starts to develop. Four texts, representative of general developments during the eleventh and twelfth centuries, deserve being highlighted here. The *Xiang Dian* 香谱 (Treatise on aromatic substances, 1094) contains the first detailed description of the different types of resinous camphor.¹¹ This information may be supplemented by the *Songhuiyao*, which noted that, by 1141, eleven different camphor products were being imported to China, two of which were regarded by the Song bureaucracy as low-value or coarse items.¹² These bits of information suggest that knowledge of this Southeast Asian product was becoming increasingly widespread amongst the populace in China, at a time when a wider range of camphor products were being exported from Southeast Asia to China during this time.

By the twelfth century, the use of camphor had become much more detailed and diversified. Whereas medicinal texts such as the *Xiao'er weisheng zongwei lunfang* 小儿卫生总微论方 (Treatise on formulas for infantile health care, 1158) and the *Taiping huimin heqi jufang zhinan* 太平惠民和剂局方指南 (Formularies of the Bureau of People's Welfare pharmacy, 1148) contain recipes for the expelling of gastrointestinal wind in children and for dealing with food poisoning,¹³ the *Chenshi xiangpu* 陈氏香谱 (Material of Chinese incense, n.d.)

10 Sun Simiao 孫思邈 (2007), *Yinhai qingwei* 銀海精微 (Essential subtleties on the Silver Sea, n.d.), in: 文淵閣四庫全書電子版 Wenyuange shikuquanshu dianziban, 1:41a and b. Hong Kong: Digital Heritage Publishing.

11 Hong Chu 洪 (2007), *Xiang dian* 香譜 (Treatise on aromatic substances, 1094), in: 文淵閣四庫全書電子版 Wenyuange shikuquanshu dianziban, 1:1a and b. Hong Kong: Digital Heritage Publishing.

12 Xu Song, *Songhuiyao*, zhiguan 44:21a–23a.

13 *Xiao'er weisheng zongwei lunfang* (2007), *Xiao'er weisheng zongwei lunfang* 小儿卫生总微论方 (Treatise on formulas for infantile health care, 1158), in: 文淵閣四庫全書電子

contains recipes for the manufacture of different types of incense, for which the specified quantities of ingredients needed, including camphor, are recorded. Interestingly, in the case of the *Chenshi xiangpu*, very small quantities of camphor, denoted in terms of unit market prices as opposed to units of weight, are recorded.¹⁴ This correlates to the changes in the camphor trade as noted in the *Zhufanzhi* (1225), a text very familiar to Southeast Asian historians, where camphor in minute or grain-like sizes had become the staple of the trade (Chen and Qian 2000:313).

The implications for Southeast Asian history are fairly significant, in that it details the physical characteristics of the camphor that the region was exporting to China by the late twelfth century. It also provides information on the impact that changes to China's maritime trade by the late eleventh century had on the development of trade in certain products from Southeast Asia, which has hitherto been discussed in general terms but not sufficiently explicated in detail with regard to specific products. Thirdly, the appearance of camphor oil by the late eleventh century, produced from the distillation of *Blumea balsamifera*, indicates that the competition for a slice of the Chinese market had by this time begun to include Southeast Asian areas where *Blumea balsamifera* occurred, such as large parts of Island Southeast Asia and the Philippines. The textual data provide the context in which a specific aspect of Southeast Asian trade with China shifted from one purveyed almost solely by Mainland Southeast Asian polities save North Sumatra and Borneo in the first to early second millennia AD, to one that saw the general participation in the trade by almost every port in Southeast Asia through the export of different products that contained the camphor chemical compound. This was possible only as the Chinese market became highly attuned to the variety of products that could be obtained from Southeast Asia on a regular basis. China's changing consumption patterns were reflective of the interactive dynamic that had developed between the two regions from the late eleventh century onwards.

Carrying out keyword searches for Southeast Asian products is one of the more straightforward ways of using the digital texts to further our understanding of Southeast Asian economic history. The more qualitative challenges per-

版 Wenyuange shikuquanshu dianziba, 1:17b and 18a. Hong Kong: Digital Heritage Publishing; Chen Shiwen 陈师文 (2007), *Taiping huimin heqi jufang zhinan* 太平惠民和剂局方指南 (Formularies of the Bureau of People's Welfare pharmacy, 1148), in: 文渊阁四库全书电子版 Wenyuange shikuquanshu dianziban, 10:55a. Hong Kong: Digital Heritage Publishing.

14 Chen Jing 陈敬 (2007), *Chenshi xiangpu* 陈氏香谱 (Material of Chinese incense, n.d.), in: 文渊阁四库全书电子版 Wenyuange shikuquanshu dianziban, 1:2b–4b. Hong Kong: Digital Heritage Publishing.

tain to bringing these data, which are, by nature of the texts, inherently Sino-centric, to bear on Southeast Asian topics of enquiry. That qualitative process is where the scholarly input begins. This becomes all the more important as questions of a more interpretive nature are asked.

4 Searches on Polities of Southeast Asia

One of the challenges in working on premodern Island Southeast Asian history is the relative absence of information pertaining to the coastal polities of the region. While significant progress has been achieved in elucidating the nature of the economic, geopolitical, socio-cultural, and political characteristics of these polities (Andaya 2008; Heng 2009; Hall 2011), significant gaps continue to remain. At the same time, there is relatively little textual record of the many minor polities that proliferated during the premodern era. The paucity of new textual materials has hitherto been the most compelling argument for developing indigenous anthropological sources of data. This has also forced the narrative to maintain a hypothetical tone so far (Manguin 1991; Heng 2012).

Some exceptions to this rule do exist. Billy So's work on Srivijaya, for example, demonstrates how, with sufficient aggregation of textual references, the developmental trajectory of a polity may be traced in some detail, and that important conclusions may be drawn (So 1998). Earlier studies by such scholars as G. Ferrand and J.V.C. Mills have also demonstrated the utility of Chinese sources in illuminating the history of specific polities and geographical areas (Ferrand 1918; Mills 1979).

At a basic level, it is possible to generate search results that would yield similar outcomes to those that may be run on specific trade products. Taking Srivijaya (Sanfoqi 三佛齊) as an example, a pattern pertaining to the dates of the texts of a keyword search on 'Sanfoqi' may be discerned for the chronological record of this southeastern Sumatran polity. Only one text dates to before the Song dynasty: the *Jiutangshu* 舊唐書 (Old record of the Tang dynasty, c. 941). There is a larger proliferation of texts of the Song period that do contain references to Srivijaya, although the biggest proportion is dated to the Southern Song period (1127–1278). Texts of the Yuan period (1279–1368) containing references to Srivijaya then drop dramatically, followed by a profusion of texts with references from the Ming (1368–1644) and Qing (1644–1910) periods. Figures 2 and 3 show the distribution of texts with the term 'Sanfoqi', as well as the total number of occurrences of the term in these texts, according to dynastic periods.

FIGURE 2 Number of texts containing the term ‘Sanfoqi’, by dynastic period

FIGURE 3 Number of occurrences of the term ‘Sanfoqi’ in textual sources, by dynastic period

These data suggest that the approximate period of Srivijaya's interactions with China dates from the tenth century, corresponding to the Song period. A more detailed perusal of the references, however, reveals that apart from those dated to the fifteenth century, almost all of the Ming period texts contain information copied from earlier ones. This suggests that Srivijaya's interaction with China most likely ended by the fourteenth century. This would concur with information from Southeast Asia, which indicates that the polity of Srivijaya likely met its demise in 1275, when its capital was sacked by Majapahit Java (Lieberman 2009:793).

Several qualitative aspects of Srivijaya's past may also be elucidated from such keyword searches. Significant references to the different types of products produced or made available by the polity may be found, and such information, supplemented by the geographical and commercial treatises already familiar to Southeast Asianists, would no doubt help to develop a fuller picture of the evolution of the product trade that this polity, and Island Southeast Asia in general, was engaged in. Additionally, such treatises as the *Quanzhi* 泉志 (Treatise on money, c. 1149) provide information on the currencies used by the Southeast Asian polities known to China during that time. Indeed, the text contains what is likely to be the earliest recorded image of a sandalwood flower coin.¹⁵ At another level, this numismatic information could be used to demonstrate the transregional nature of specific concepts of the store of value, and how exchanges were likely conducted at the trading ports of specific polities between merchants coming from different currency spheres (Heng 2006).

Other information, including ethnographic data, may also be obtained. As an example, the *Yueshi* 乐史 (History of music, c. 962) notes that Srivijaya, along with other polities in the region such as Dandan, Linyi, Champa, and Tonkin, were regarded as first-tier polities in the area of music. The text further notes:

Srivijaya is a different type of southern barbarians. It is at the opposite of Champa. In the midst of that state, the written language used is Sanskrit. The ruler's ring is used as a seal. The musical instruments available are the small zither and the small drum. The stepping tunes of the Kunlun slaves (Austronesians) are [used] as music. These tunes are known (in China?).¹⁶

15 Hong Zun 洪遵 (2007), *Quanzhi* 泉志 (Treatise on money, 1149), in: 文渊阁四库全书电子版 *Wenyuange shikuquanshu dianziban*, 12:1b. Hong Kong: Digital Heritage Publishing.

16 Chen Yang 陳暘 (2007), *Yueshu* 樂書 (History of music, 962), in: 文渊阁四库全书电子版 *Wenyuange shikuquanshu dianziban*, 159:1b. Hong Kong: Digital Heritage Publishing.

Hitherto unknown Chinese textual references also provide information on the geopolitics of Island Southeast Asia. Two records are highlighted here as examples of the potential that such Chinese texts could provide in terms of additional information on such matters. The *Xuzi zhitong jianchangbian* 續資製通鑑長編 (Extended continuation of the comprehensive mirror to aid in government, c. 1183), for example, records that in 1079,

Srivijaya and Jambi's envoys came to present tribute of products of the land. The state of Jambi was examined for twenty-seven days. On the twenty-second day of the eighth month [of the second year of Yuanfeng (ie 1079), Srivijaya was rewarded with products. This did not include Jambi. On the seventeenth day of the tenth month of the fifth year of Yuanfeng (ie. 1082), an edict was issued for them (ie. both states) together.¹⁷

Additionally, the *Mingshi* 明史 (History of the Ming dynasty, c. 1739) notes that in the thirteenth year of Hongwu (1380),

When [the ruler of Srivijaya] again submitted tribute through an envoy, Srivijaya was given a printed ribbon. Java lured (the Srivijayan envoy into a trap?) and murdered him. The Son of Heaven was infuriated, detained the envoy [of Java] for more than a month, and then pronounced a guilty sentence. As a rebuke, the gift [that had been conferred upon Java] had to be returned.¹⁸

Two points may be elucidated here. Firstly, contrary to the narrative presently held, Jambi does not appear to have taken over the mantle of the title 'Sanfoqi 三佛齊' from Palembang by the second half of the eleventh century. This comes in the wake of the confusion in the Song court over the status of the Chola Kingdom during this time (Tan 1964). The only mention of Jambi becoming Srivijaya may be found in the *Lingwai daida*, which suggests that the rivalry between Palembang and Jambi was not likely settled in Jambi's favour until at least the late twelfth century, if at all. Indeed, later texts, including the *Zhufanzhi* and the *Dade nanhaizhi* (1307), do not contain information on this transition. It was

17 Li Dao 李燾 (2007), *Xuzi zhitong jianchangbian* 續資製通鑑長編 (Extended continuation of the comprehensive mirror to aid in government, 1183), in: 文淵閣四庫全書電子版 *Wenyuange shikuquanshu dianziban*, 299:2b. Hong Kong: Digital Heritage Publishing.

18 Zhang Tingyu 張廷玉 (2007), *Mingshi* 明史 (History of the Ming dynasty), 1739, in: 文淵閣四庫全書電子版 *Wenyuange shikuquanshu dianziban*, 324:36b. Hong Kong: Digital Heritage Publishing.

only with the publication of the *Daoyi zhilue* that Palembang became known to the Chinese as the former seat of Sanfoqi.

Secondly, the Chinese texts also provide useful data on Island Southeast Asia's strategies for understanding the geopolitics of the region. While the notion of utilizing China in the competition for establishing regional hegemony is not a new concept, the narrative articulated thus far has been one in which China was the unwitting tool through which the rivalry played out, even as, in effect, the competition took place in Island Southeast Asia itself. What these two references suggest, however, is that the Chinese court was an arena in which Island Southeast Asian polities engaged in their rivalries.

Thus far, the examples provided have illustrated topics of enquiry that have obvious relevance to Island Southeast Asian history. However, the task of extracting information on Southeast Asia from these mainly China-centred references is much more challenging. As an example, we may consider the *Xuzi zhitong jianchangbian*.

The Prefect of Guangzhou Chen Shiqing said that the various states beyond the seas that present products of the land (that is, tribute), arriving at Guangzhou, up to the present time [bring] rhinoceros horn, elephant [tusks], pearls, textiles, aromatics and different treasures. [These states] take note of the demands of the governmental agencies. Other [products] shipped are bulky items (that is, low unit value products), for which they desire that the prefectures' agents ascertain the correct (market?) information (demand levels of specific products?). It was memorialized (by the Chinese officials to the Song court) that items not presented as tribute are to have market taxes (not import duties) tabulated [and collected]. [The state replied that] the envoys of every state were to have an assistant magistrate [assigned] to assist him. The Dashi Arabs, Chola, Srivijaya and Java and other such countries did not exceed [the need for] twenty persons. Champa, Tengliumei (ie. Ligor), Borneo, Siam, Ma'it and other such countries did not exceed [the need for] ten persons. Additionally, they (the prefectural administration or the assistant magistrates?) were to come to give grain and money (to the foreign envoys?). Amongst Guangzhou's foreign guests (ie. sojourners) were imposters who committed this offence [of pretending to be envoys]. As a reward, all miscellaneous goods (ie. Chinese goods) obtained in market trade were to be exempted from tax calculations (ie. market taxes). As for private items (that is, items acquired outside of official channels), [these] did not fall under this rule.¹⁹

19 Li Dao, *Xuzi zhitong jianchangbian*, 87:14a and b.

The passage above provides a lot of information on the nature of China's interactions with Southeast Asian polities and its people. Firstly, the trade at this time involved both luxury products, which were classified as state monopoly items and wholly purchased upon entry into China by the Song court, and bulk commodities, which were traded into the Chinese market either through government agents, if envoys were the purveyors, or on the private market, if private individuals were the importers. In other words, market differentiations in China were a structural norm that foreign traders, including those from Southeast Asia, had to learn to negotiate. Secondly, while state-sponsored trade missions to China relied heavily on market information provided by the Chinese bureaucracy, the same may not have been the case for those operating in their private capacities. Thirdly, state-sponsored trade missions were beneficiaries of substantial tax exemptions and stipends provided by the Song court, whereas private traders were not. Fourthly, almost all foreign states were unable to exert sufficient control over the credentials of their representatives at the Chinese port-cities, and the Chinese bureaucracy had to ultimately make the determinations of credentials itself. Finally, in the Song court's view, the Arabs, South Asians, Srivijayans, and Javanese were its prime trading partners, towards which the largest proportion of its administrative resources were poured. It is also apparent that this two-tier ranking was solely for trade purposes.

Given that a significant amount of Chinese textual information is of this narrative nature, this raises a number of pertinent questions for Southeast Asianists. How does one extract information from this passage that would be useful for illuminating Southeast Asian history? Which bits of information in this passage may be assumed to be directly applicable to specific Southeast Asian polities and not just to Maritime Asia in general?

Secondly, what extent of knowledge of Chinese history would a Southeast Asianist need in order to be able to make sufficient sense of such textual information for the translation and data extraction work to be fruitful? In the case of the passage above, a good understanding of Chinese maritime history would situate the impact that the policies had on Srivijaya and other Southeast Asian polities in the area of diplomacy and international trade across the South China Sea.

Another issue pertains to that of familiarity with the governmental lexicons and bureaucratic procedures used in the records specific to individual dynastic periods. Herein, official recommendations from the periphery to the court, directives from the court to the periphery, the implications of the different ranks used for both representatives of the Chinese state and those of foreign polities, as well as the different fiscal terms, are essential for the extracted information to contain the nuances the original texts embody.

Directly related to the challenge of lexicon is that of language. One critical assumption Southeast Asianists have to make, at least in the case of Southeast Asia in Chinese texts, is that the names used to denote specific polities change over the course of time. The problem with this, which is essentially one of philology, is that it relies on the assumption that these changes can be tracked, initially through the use of the sections on foreign polities found in every dynastic history, and then cross-referenced with the rest of the Chinese textual corpus for the dynastic period in question. This rubric is then supplemented by the geographical treatises with substantial information on Southeast Asia, so that alternative names of the same polities or places may be added to the search list.

More challenging are the different renditions of place names in the various Chinese dialects. This issue had been alluded to by such scholars as G. Wade (Wade 1997). Such challenges not only result in several different names for the same polity or place, but also have the potential to obscure the results of any keyword searches done on a digital platform. However, such challenges are not necessarily stratified only in the chronological sense. The need to generate a robust glossary of relevant place names for individual polities would be critical for any search to be sufficiently comprehensive.

As an example, Lambri, a port-city on the northeastern coast of Sumatra, appears variously as 藍無里 (*lanwuli*) and 南無里 (*nanwuli*), while the middle of the three characters for Lambri, found in the *Zhufanzhi*, in fact does not exist in Chinese, which suggests that that particular place name may have been based on a Chinese dialect (Chen and Qian 2000:80). All three place-name terms occur in texts from the Southern Song period. All these suggest that unlike the more prominent states of Southeast Asia, the Chinese place names of smaller polities of the region were much more fluid, with Chinese knowledge of these places being defused, and perhaps proliferating at the regional rather than the national level.

On top of that, the amount of information on these places that may be aggregated through keyword searches is very limited. As an example, a search on Tambralingga (單馬令, 丹馬令), a polity located on the east coast of the Isthmus of Kra, yields only two references of significance. The *Gezhi jingyuan* 格致鏡原 (Mirror of the origin of the investigation of things, c. 1685) notes that in the second year of Qingyuan (1196), Tambralingga submitted a gold umbrella to the Song court,²⁰ while the *Yuding lidai fuhui* 御定歷代賦彙 (Com-

20 Chen Yuanlong 陳元龍 (2007a), *Gezhi jingyuan* 格致鏡原 (Mirror of the origin of the investigation of things, 1685), in: 文淵閣四庫全書電子版 Wenyuange shikuquanshu dianziban, 31:23a. Hong Kong: Digital Heritage Publishing.

pendium of fu through the ages, c. 1722) records that 'old swords are exported by Tambralingga'.²¹ This information is repeated in the *Guangdong tongzhi* 廣東通志 (Local gazetteer of Guangdong, c. 1599), while the *Mingyi tongzhi* 明一統志 (Comprehensive gazetteer of the Ming dynasty, c. 1461) repeats the information concerning Tambralingga that was originally recorded in the *Zhufanzhi*.²²

Similar issues have been noted in preliminary keyword searches conducted on such places as Tamiang, Deli, and Temasik, which were active land-settlements, polities, or harbours for significant periods of time, but which only contain singular entries in the Chinese textual corpus, if searches are conducted solely on the Chinese characters by which they are presently known. Until variant forms of their place names in Chinese or dialects are discovered, the possibility of retrieving more textual materials on these important places is impossible.

Scholars may in fact have much better success with Chinese texts for the exploration of small Southeast Asian polities when local gazetteers produced at the provincial levels are eventually digitized. This, however, is beyond the scope of the present article or digital resources available at present, and would have to be revisited as a research avenue in the future. More to the point, it would at least appear at this juncture that keyword searches would be most productively carried out on the most prominent Southeast Asian states, with the hope that smaller polities and geographical locations would also have been noted at the same time.

5 Challenges with Keyword Searches on Chinese Terms with Southeast Asian Applications

A final aspect of the challenges to using digital keyword searches pertains to searches on terms that have widespread applications in the historical Chinese context. The issue of the taxonomy of key terms, given the specificity of Chinese characters, has initially opened scholars to the possibility of utilizing taxonomical terms within specific topical contexts as a means of identifying textual references, and to reveal hitherto unknown information from a Chinese per-

21 Chen Yuanlong 陳元龍 (2007b), *Yuding lidai duhui* 御定歷代賦彙 (Compendium of fu through the ages, 1599), in: 文淵閣四庫全書電子版 Wenyuange shikuquanshu dianziban, 38:29a. Hong Kong: Digital Heritage Publishing.

22 Li Xian 李賢 (2007), *Mingyi tongzhi* 明一統志 (Comprehensive gazetteer of the Ming dynasty, 1461), in: 文淵閣四庫全書電子版 Wenyuange shikuquanshu dianziban, 90:18b. Hong Kong: Digital Heritage Publishing.

spective. While such a method could potentially include anything, they have been applied primarily to physical things, or objects (including animals and even ethnic groups) with unique characteristics. Don Wyatt, for example, has successfully traced the history of the people of Negrito descent in China in the first and early second millennia AD, primarily through the use of the term *kunlun* (崑崙) (Wyatt 2009). Although primarily a Sinocentric historical account, the work nonetheless provides a detailed study of the trade in slaves from Southeast Asia to China, and the treatment of less prominent ethnic groups from Southeast Asia that did not interact with China from the privileged position of trade or state-level relations. Similarly, Jung Pang Lo's study of the development of the Chinese navy, using the character *chuan* (船), under the Song dynasty has provided glimpses of the possible military strategies of the Chinese and how that development may have affected its relations with Southeast Asian polities that relied on the maritime space of the South China Sea as a means of external interaction (Elleman 2012).

Digital texts can be helpful in these examples by providing a sufficiently large aggregate of references on specific objects or terms that have direct references to Southeast Asia. The links between the different terms used in reference to what may otherwise be regarded as generic objects, such as 'vessel' or 'ship', may be aggregated to help in the construction of a detailed taxonomy. In the process the specific characteristics, not just of the objects themselves but also their usage in the Chinese texts in reference to the Southeast Asian context, may be elucidated.

In a study recently conducted on the evolution of the navy in the Melaka Straits context in the first and second millennia AD (Heng 2013), for example, I have noted that by the seventh century, the term *bo* (舶) was used in the Chinese texts to refer to seagoing mercantile vessels of Southeast Asian and Indian Ocean origin. Indeed, the term *bo* came quickly to have prefixes that denoted their origin, such as 'Kunlun' or 'Shilifoshi' (Srivijayan).²³ As familiarity and knowledge of Island Southeast Asian polities and ports developed in the twelfth and thirteenth centuries in China, specific Chinese terms, developed in Chinese since the Han dynasty to denote specific types of watercraft, were applied to descriptions of Southeast Asian water crafts as well. Thus, in the entry on Srivijaya in the *Zhufanzhi* (c. 1225), for instance, *zhou* (舟) and *chuan* (船) were used alongside *bo* (舶) to denote indigenous or local vessels, naval vessels, and foreign mercantile vessels respectively (Chen and Qian 2000:46–47; Heng 2013).

23 *Taisho Tripitaka*, vol. 51, no. 2085, accessible through the SAT Daizōkyō Text Database. http://21dzk.l.u-tokyo.ac.jp/SAT/index_en.html (accessed 13-4-2011).

This taxonomy, however, is tied very specifically to the entry on Srivijaya in the *Zhufanzhi*. While it is possible that the same term has the same meaning in another text on Southeast Asia from the same period, this assumption is not necessarily a foregone conclusion. More importantly, these same terms were originally developed to denote Chinese watercrafts. In other words, when searched for in the digital corpus, these terms produce search results that are embedded in both Chinese and foreign contexts, all of which are not differentiated by the search tools. Given the common nature of these terms, it would require laborious work to comb through the entirety of the research results to ascertain any relevant references to Southeast Asia.

The inverse is also true of Chinese terms which may have originally been developed to denote specific foreign objects, but which were then co-opted to denote Chinese ones as well. Thus, the term *bo* (舶), while in the seventh century clearly denoting a seagoing mercantile vessel of Southeast Asian or Indian Ocean origin, had by the eleventh century come to denote Chinese seagoing mercantile vessels as well. In reference to the case study of Southeast Asian products earlier in this article, the term *nao* (腦), originally used to denote *Dryobalanops aromatica*, came to also include *Blumea balsamifera* by the late eleventh century, and *cinnamomum camphora* as well by the fifteenth century. Very often, there is no indication as to which of these types of camphor were referred to in a given text. It can therefore be very difficult to tease out more nuanced and conclusive data from the textual references, especially if the textual context in which the term is embedded does not provide any clues for the purpose of ascertaining such differences.

Finally, the trade of certain types of Chinese products to Southeast Asia cannot be fully elaborated primarily through textual research. Chinese ceramics, with the exception of a very few highly prized types used in imperial settings, have very few distinct terms that have been developed to distinguish them from each other. While archaeology may provide useful information on the range of ceramics imported from China, the absence of more specific textual information, due to the lack of a larger range of specific terms, hampers scholarship from using textual sources to trace the origins and exchange networks through which these ceramics were fed into Southeast Asia. Similarly, while textual sources do provide a sense of the different types of Chinese textiles exported to Southeast Asia, the actual appearance of these textiles is not known, due primarily to the absence of descriptive adjectives used in conjunction with the terms of the different textiles, and can only be conjectured through the textiles recovered through archaeological means within China (Heng 2017).

6 Conclusion

This article has sought to make the argument that scholars of premodern Southeast Asian history may have to reassess the place of Chinese textual materials as a source of information on the polities and societies of the region. The digitization of the texts, along with keyword search functions, opens up the possibility of elucidating new, previously unknown information, making these texts viable sources of information that could provide new data on premodern Southeast Asia. In this regard, it is imperative for Southeast Asian historians to develop search methods that are unique and relevant to Southeast Asian history, in particular in terms of the different nuances of key words that have a direct bearing on the outcome of such searches conducted with digital databases. As such, glossary lists should be developed, which will make the Chinese textual documents increasingly accessible for the obtaining of aggregated pieces of historical information.

Equally important, an increased understanding of the Chinese historical context amongst Southeast Asian historians, in particular the evolving administrative and bureaucratic structures of government in China over time, is necessary for the information embedded within the narratives of the texts to be successfully extracted. Given the substantive role that China has played in Southeast Asia's history over the course of the first and second millennia AD, such requirements within the skill sets of Southeast Asianists may become a basic necessity with time. There will no doubt be a need to enhance the familiarity of researchers with the associated Chinese context, including the taxonomy, historical background, and language variations, so as to ensure successful engagement with these texts.

It is clear that as technological advances enable a levelling of the playing field in terms of the accessibility of textual materials, Southeast Asian scholars will be increasingly obliged to re-engage with these texts and, in the process, reintegrate premodern Southeast Asian history with that of the larger Sino-logical world. At the least, it would be able to provide narrative information that is absent from the new data that are presently generated primarily through archaeological research. While this article has focused on Southeast Asia and Southeast Asian scholarship, the arguments raised here may be extended to South Asian history as well, in particular the Bay of Bengal region and Sri Lanka.

It has to be noted that keyword searches as made possible by the digital age are merely a first step in the development of more complex methods for historical research. In other words, running a number of keyword searches will not necessarily eradicate the problem of inaccessibility or unlock the corpus of texts that has hitherto been perceived as being too unproductive to engage with.

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