

**MALAY WORLD STUDIES AT ATMA VIA THE PORTAL**  
**<http://www.malaycivilization.com>**

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*Abstract: ATMA (The Institute of the Malay World & Civilization) in UKM started out with one database in 1999 named PADAT. Today, there are nine databases offering a respectable array of information and materials via <http://www.malaycivilization.com>. These databases are continuously expanded with the objective of broadening and deepening research on Malay world studies during a time when the increasing use of IT and its widespread acceptance among researchers have not only brought massive changes to scholarly research and communication, but also affected the very survival of research institutes themselves.*

*Abstrak: ATMA (Institut Alam dan Tamadun Melayu) di UKM mula membangunkan pangkalan datanya yang pertama, PADAT, pada tahun 1999. Kini, sudah ada sembilan pangkalan data di <http://www.malaycivilization.com> yang menyediakan pelbagai maklumat dan bahan tentang pengajian dunia Melayu. Kesemua pangkalan data itu akan terus dikembangkan dengan objektif untuk memperluaskan dan mendalami pengajian alam Melayu di era IT yang penggunaannya bukan sahaja semakin meluas diterima sarjana dan penyelidik, tetapi juga telah memberi kesan besar kepada kewujudan institut penyelidikan itu sendiri.*

I have discussed various problems encountered in bibliographic control and the availability of Malaysiana and Southeast Asian materials in a series of articles (1984a, 1984b, 1985, 1987, 1991, 1996, 2000). Here, in the following section, I will attempt to highlight a new model of collection building and digital management. To start with, we note that in time, research institutes will have more materials. But will these be more accessible? Or is more likely that when books and journals proliferate, access to them will become more elusive? Do we need alternative forms of access or only new technologies? What can we do to meet challenges in information retrieval in the 21<sup>st</sup> century and thereafter? What is the best we can do? How can this best be established and maintained when there are so many competing academic and research needs and yet so few human and material resources at hand? Underlying these questions is the universal concern about quick and easy access.

As knowledge becomes more interdisciplinary, the standard bibliographies and

conventional special collections have become less effective and useful. Following the development of full-text databases, networked or otherwise, researchers now expect and demand faster, easier and more efficient access. Despite 7,000 database producers churning out 4 – 5 billion records, mushrooming 300% since 1985 (Rutstein et al 1993: 42), there is not a single commercial database on Malay studies. In such a setting, the relevant research institutes and libraries should search for new ways to manage their collections to keep up with the expectations of their researchers. We at ATMA have handled these problems by setting a priority on what and how to collect initially, and what to defer for the future. We certainly not achieve goals that are beyond our control, but we cannot fail in the sure things (Ding & Supyan 2000).

ATMA promotes inter-disciplinary, or as it is sometimes called, cross-disciplinary research. This is mainly due to the fact that scholarship on the Malay world has moved ever more into science and technology, and is no longer confined to social sciences, while the inherent interdisciplinary

nature of subjects such as sociology and anthropology is continuously reinforced. Another striking trend in Malay studies is the spread of interdisciplinary work into the corners of virtually every discipline within the humanities. One can find articles on the Malay World not only in journals and other publications devoted to Malay studies, but also disciplines that have nothing to do with Malay studies. This means that the traditional demarcation of subject specialization has become blurred, as highlighted by Wilson and Edelman (1996), and has subsequently sharpened our concern for the configuration of PATMA's (Perpustakaan Institut Tamadun and Alam Melayu) collection. It is general knowledge that to serve researchers well, any research collection must expand systematically to include as much material in as many sources as possible. The crux of the problem is how to balance growth with accessibility.

There are innumerable difficulties in providing material to an expanding and diversifying clientele. The evolution towards easy and quick access demands a new approach in collection development and management, besides heightened cooperation between libraries. The persisting problems in finding material easily and quickly, in PATMA at UKM, Dewan Bahasa dan Pustaka and PNM (Perpustakaan Negara Malaysia) in Kuala Lumpur, Koleksi Za'ba at University of Malaya as well as USM (Universiti Sains Malaysia) in Penang or at the Special Collection at Kedah State Library in Alor Star, all of them enviable collections on Malay studies, prompt us to develop PADAT, a database of individual articles relevant to Malay world studies.

We attempt to extract and repackage, within a five-year period, some 50,000 articles scattered now in different locations, formats, sources, forms and in different languages and sizes, from published books, journals, databases and the Internet to flimsily bound, oddly shaped and quasi-published items that do not seem to fit into any of the usual publication categories. Eventually, this proposed collection will have more material than the individual Malay World library collections in UKM, UM, DBP, PNM or USM. Nevertheless, this "new" collection cannot be seen to be, in Brainin's words (2000:25) as a "de-centering" PATMA, or the Southeast Asian Collection at Perpustakaan Tun Seri Lanang or any other libraries, but should be understood as a complement to them. Pooling together library resources scattered in various publications and departmental libraries will also gain big advantages over a departmental or branch library in providing researchers with wider exposure. This proposed broad-based core

collection of extensive material will satisfy the needs of the majority of researchers in a way no single institution can do at the moment.

The idea to develop PADAT in April 1999 came from the innovative development of individual-articles-delivery in CD-ROM and other on-line databases that we then marvelled at. The method of document delivery referred to is an improvement over the on-demand publishing system adopted by UMI (University Microforms International) and BLLD (British Library Lending Division). Being aware of the insufficient resources and of upset and angry scholars looking for information about the Malay World scattered in different locations all over the world, we came to believe strongly that we must invest in the future by setting up this database to be sure of being able to provide materials, both new and old, instead of growing dependence on commercial databases with pre-designed products, which can only fulfil part of research requirements. In other words, we could not drift into the future and leave collection development to the publishers of commercial databases.

Similarly, we could not drift into an uncertain future by relying increasingly on electronic information that we do not own (Lesk 1997). The key issue in database building, as in collection building, is to amass as much of the relevant material as possible in the face of the proliferation of publications. Without new material, any library collection must turn stagnant, obsolete and be forgotten. Taking one step forward, with a good collection and appropriate management and retrieval technology, we can provide better and faster access to any specific items in PADAT. We believe strongly in IT for its increasing power in storage, retrieval and dissemination, and in the strength of the size of the research collection. Both form the blueprint for future research and scholarship. By developing a big collection, we can anticipate 'just-in-case' as well as fulfil 'just-in-time' demands from researchers. By indexing all articles by author, title, keywords, source, date and accession number and series, we can provide better access.

This database is never intended to compete with *Excerpta Indonesica*, which has indexed some 32,000 articles since 1970, or SASI (Southeast Asian Serials Index), (<http://database.anu.edu.au/asia/indo/> – a joint project between KITLV and ANU (Australian National University), or any other project in the Netherlands, United Kingdom, USA, Australia, Malaysia and Singapore. Instead, it is hoped to complement

them in one way or the other. As long as the present scenario remains, we will continue to collect and index relevant materials intensively. We use the term "individual-articles-collection" to create a new look to the database, besides the point that it represents a model for collection development based on knowledge about researcher needs and expectations. Our argument, and the important issue, is that contents in PADAT are available in accordance with the researchers' needs for specific articles.

Conversely, the conventional concept of subject specialization in a blanket collection, combined with numerous unrelated materials, is no longer novel in the new information environment that emphasizes personalized, customized and made-to-order services. Worse yet, such an 'unindexed' collection can easily become another "grey literature collection" that lack users, and remain attractive and competitive. This individual-articles-collection is based on an understanding of the intellectual content of the individual items and the needs of the users following an explosion of multidisciplinary programs (Wilson & Edelman 1996: 199), and not on the institutional structure of conventional subject specialization where material is acquired and classified within the confines of single academic areas of inquiry and serves only the needs of particular disciplinary research groups.

Due to copyright problems, only some articles can be available on-line. Nevertheless, all the 37,000 articles presently amassed are available in photocopies for reference at ATMA. Many have questioned the wisdom in setting up a database using conventional photocopying. They feel that there is no future for print collections, since more and more print material has been replaced by electronic publications easily accessed by researchers, and since many major publications will come to be published digitally. Nevertheless, we feel that electronic publishing and the Internet will not stop the printing press. Instead, they will stimulate an immense growth in the amount of material printed. We too believe that no one medium will completely replace another. However, we have two immediate problems.

First, current electronic environment is "too immature for it to become a trusted and reliable medium for the collection and preservation of the record of scholarship" (ibid: 27) because of different interfaces, frequent search engine crashes, different terms and conditions in licensing agreements and many others. Second, as digital material moves toward the "pay-for-use" model, it

has already begun to disrupt the free flow of information and the exchange of scholarship (Branin et al 2000: 30). Thus, if given the choice, most libraries will prefer to receive print publications to electronic ones if the latter involves electronic duplication of printed material. The main reasons are that they are far more durable and are more likely to be more easily accessible in the future. Already, there is much material on diskettes, microforms, tapes, CD-ROMs and databases that can no longer be read because the relevant access software has become obsolete. Although technology can perform more functions to satisfy more human needs in an ever growing variety of ways, the importance of IT to researchers in Malay studies should not be over-emphasized. This is partly because the vast majority of Internet users are not running the latest generation of Internet browser software on the latest computer hardware. Despite the fact that there are more and more web-based databases (see appendix 1) on Malay and Southeast Asian studies boasting a global audience, researchers still have difficulties in retrieving material. Furthermore, most researchers and scholars cannot gain instant retrieval of complete copies of documents because of copyright, technical and financial problems. Research libraries in future will most likely be stocked with a rich mix of traditional print materials, existing side by side with digital or Internet-only scholarship and other media yet to be invented (Valauskas 2000: 109). Today, it is still unclear whether networked communication will bring more freedom or restriction to the dissemination of information and material.

Bearing in mind the obsolescence problems of software and hardware, such as limited time, staff and funds, we feel the conventional photographic technique is the most practical and the best choice. Though we are enthralled by IT, investing in photocopying for preservation and accessibility continues to be a wise thing to do. It is because photocopying, like digitizing, not only offers many opportunities for reformatting materials and increasing access, but also promises a bewildering array of options for storage and delivery. Photocopies do not preclude digitizing in the future. Anyway, collection development is not only about technology, but information management as well, and also about what research institutes can do to create content, manage it, add value to it, stretch it, recycle it and transmit it, whether through photocopying, microfilming or digitizing. So far, printed material, including photocopies, have survived many threats of extinction and their position has been enhanced with every new medium of technology. In other

words, photocopies, like other printed material do not look like they will disappear. Preservation through constant photocopying is cheaper and more practical compared with the costly periodic migration of digital information as and when the writing, displaying, storing and retrieving technology changes. Nevertheless, it is only fair to mention that this semi-digital database lacks the following potential of electronic information:

1. The ability to match speed of thought with simultaneous speed of communication,
2. The varying and complex development of access points to information,
3. The ability to use hyperlinks, through HTML language, to enable seamless access to information,
4. Researchers cannot control the amount of information they want,
5. The potentiality for remote access is limited.

Other common problems with photocopying include the deterioration of quality at each successive reproduction, as do microfilms, due to acid content in the paper and problems of wear and tear.

Old and established libraries in the past enjoyed an unchallenged advantage in providing information and material to researchers. However, nowadays, sustainable competitive edge is no longer based on collection development only, but also on how the collection can best be managed and exploited by researchers using up-to-date technology. Following the tremendous growth in computational power, and in networking bandwidth and connectivity, and seeing the fast rising number of research institutes making information digitally available through the Internet, ATMA undertook to build and implement a metadata information system for Malay world studies.

Now, metadata is a critical mechanism both in knowledge representation and data mining of archival material that is the cumulative result of digitization in the capture, compression, manipulation, storage and transmission of digital images. These technological advances have solved many problems in the retrieval of pictorial and visual information. Metadata is also used now to refer to descriptive information about WWW and other electronic resources, thus providing us with a means to discover that a resource exists and with details on how it might be obtained and accessed (Turner & Brackbill 1998). We started constructing PADAT, our first database, as soon as Shamsul Amri Baharuddin took over the

leadership of ATMA as 9<sup>th</sup> director in April 1999. With active support from the top management in UKM, he set a strategic view of the operation of ATMA and created a clear vision of the extent and scope of change to take place.

Given the opportunity to reposition ATMA, we began to design and develop databases focusing on Malay world studies. Subsequently one database after another was introduced. We at ATMA intend to roll out an increasing number of locally produced databases as part of our effort to broaden and deepen Malay world studies, and establish Malaysia's position in the R & D value chain. Malay world studies is after all multidisciplinary, and it is important to sustain the interests of top researchers in Malay world studies. It has been very inspiring to oversee the development of these various databases. Priding itself as the first Malay World studies database on the Internet, the portal named [www.malaycivilization.com](http://www.malaycivilization.com) caters for all tastes and presents one of the largest collection of single articles named *PADAT*. Other databases involve *Malay proverbs, Pantun baba/nyonya Malaysia, Jawi works, Malay dictionaries and Borneo Homeland*. They bloom like so many beautiful flowers in rapid succession after the rains. With more databases to be added later on, we can say that to look at the portal is to gaze into the world of Malay world studies. We develop databases that are able to reach out to and attract more researchers, scholars, students and attain critical mass at a faster rate than traditional libraries not only in developing countries that have little *infotech*, but also in advanced countries. These databases are never rivals to traditional libraries, but are nevertheless superior in all important aspects. Among them are:

- i. Increased access to various relevant information and material;
- ii. More efficient use of resources in with the form of collections;
- iii. More effective retrieval and use of relevant information;
- iv. Increased re-use of existing information;
- v. Better targeting of research and development, and surveillance and investigation;
- vi. Increased possibility for research in new areas and frontiers;
- vii. Rapid access to broader decision-making base.

All these expected results should contribute to reduced costs, and also shorter decision-making time as well as more accurate decision-

making, thus satisfying the needs of more and more researchers who are not satisfied with the existing delivery of information. Their confidence in the traditional library has been shaken because of persisting problems in retrieving the right information and material at the right time.

Databases are a radically new type of information management. It is made possible not only by new technology, but also by changes in the needs and expectations of users. In developing databases, we do not only integrate IT, but also information sources. As explained in an earlier paper (Ding 2000) they are modelled after commercial databases like UMI and SilverPlatter, but tailored to local and disciplinary needs. We focus on a subject that is close to our heart, a research area that promises good returns. Here, we **repackage** information digitally. In repackaging, we have to address current information retrieval problems and give creative insight into the future as advised by Henshaw et al (2001) and Healy (1998). Our targets are researchers who are not only critical, but also wanting continual access to information through the Internet, ensuring universal seamless access to information. In short, we have to perform the challenging task of information development and product synthesis. We have to retool our skills to provide information solution, not just information. Repackaged information delivery can *deliver higher quality information* (higher satisfaction) faster and at less cost. However, customized information cannot be cheaper, due to the cost involved in repackaging. IT amplifies our ability to produce our services. These databases, including PADAT, Malay Proverbs and N. A. Halim's Collections are the culmination of 5 years of R & D, involving some RM1 million in investments, in

terms of grants from UKM, IRPA and MIMOS, for salaries and equipments. Now R & D in ATMA has more than paid for itself, as it has given us the requisite experience to design and develop our own database to reposition ATMA strategically. Our ultimate objective is to simplify retrieval and increase the availability of cross sector information and efficiency in the use of material. Our portal [www.malaycivilization.com](http://www.malaycivilization.com), growing out of PADAT (Ding & Supyan 2000; Ding 2002b), Pantun Baba (Ding 2002d), Peribahasa Melayu (Ding & Arbayah 2002) and others, is a new information hub on Malay world studies. Its interconnection with Malay proverbs, Pantun Baba, N. A. Halim's Collection, Jawi's Works, Malay Dictionaries and many other databases makes it an unusual landmark. The vision of the future is to create a research environment where the researcher does not leave his office. To roam/ wander through each database is to relive another age and culture, and be staggered by the diversity and depth of content. Our documentation will cover material spanning Malaysia, Singapore, Borneo, Mindanao, Madagascar, Ceylon, Campa and Cape Town.

These conscious efforts by ATMA to propel research in Malay world studies are comparable to those undertaken by other full-fledged research institutes such as KITLV (Leiden), the School of Oriental and African Studies (London), ISEAS (Singapore) and CSEAS (Kyoto) (Ding & Supyan 2000 & 2003), to mention a few. This portal will also help gain ATMA the reputation of being a research centre offering global users easy and fast access to the required material in digital form. Readers from all parts of the world can search, browse, download and print selected material, individually or as a whole collection upon approval.

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