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hat Shaped the World Tomorrow's Libraries: Embracing Change to Create

LIBRARIES: A FORCE TO TRANSFORM SOCIETIES

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2013 EDITION

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### **Director's Column**



IN THE BELOVED LEWIS CARROLL CLASSIC *Alice in Wonderland*, the protagonist follows a white bunny and falls into a rabbit hole that takes her into a fascinating, albeit sometimes terrifying parallel world. There, Alice encounters people and creatures, situations and shenanigans that she never thought could exist. She breaks rules, eats cake, drinks strange potions, grows big, then becomes small. So, too, are libraries places where new worlds are created, boundaries pushed and parallel universes forged. A whole new world lies before us, and we must be brave enough to break the rules, think out of the box, explore new territories, morph into new entities, and even upsize or downsize when the situation warrants it.

In this special issue of *BiblioAsia* to mark Singapore's hosting of the World Library and Information Congress (WLIC), we have invited leaders of the library and information field to share their views on how libraries have braved new worlds and continue to be institutions through which people are stronger as a result—both as individual seekers of knowledge and as citizens of communities. As Dr James Billington of the Library of Congress expressed in his article, civilisation was built on the backs of Great Books and Ideas and through books and their ideas, individuals might in turn influence society.

On the surface, advancements in technology seem to have heralded the demise of the library as we know it. But many libraries around the world, along with the professionals who work within them, have responded swiftly to the digital age and the changing needs of modern library users. In her article, "Libraries: A Force to Transform Societies", International Federation of Library Associations and Institutions (IFLA) president, Dr Ingrid Parent, highlights how libraries have been riding the digital wave, bringing information and knowledge to the masses. She sees libraries as agents of change, empowering individuals who in turn engender positive change in society. Director of the Library of Alexandria, Dr Ismail Serageldin, also gives us an idea of how to navigate the digital age and what the information revolution means for libraries.

Technology has enabled library services to become even more efficient. The National Library of China shares with us the implementation of their digital library project and plans for a seamless integration of networks and resources. The Malaysian National Library's Ubiquitous Library Pilot Project aims to enhance the user experience and also enable library resources to be accessed from a single system. The Jogja Library in Yogyakarta has been working to implement Jogja for All, a library network that seeks to link up the libraries in the province, consolidate records and provide access to digital resources.

The National Library of Australia has developed a successful online discovery service called Trove. Trove's users have access to its extensive digital newspaper database, enabling them to correct inaccuracies caused by print-to-digital scanning. This has spawned forums and communities, all working to make Trove's resources even better.

Singapore's libraries run a gamut of activities to encourage lifelong learning such as nationwide reading programmes, storytelling sessions and exhibitions. Efforts are also made to reach the underserved members of the community through our fully equipped mobile-library-in-a-bus, Molly. Our libraries also engage the public via national initiatives like the Singapore Memory Project and the National Information Literacy Programme.

An integral part of the library system is the library professional and the Library Society of China shares their programmes and efforts to improve the quality and efficiency of library services and library professionals across China.

The diverse initiatives described in this issue echo the same sentiment—as we step into a whole new (and brave) world, we can be sure that libraries are the keys to a new and exciting future, filled with infinite possibilities that we cannot even begin to imagine.

Gene Tan Director, National Library

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### **Message from IFLA President-elect**



THE INTERNATIONAL FEDERATION OF LIBRARY ASSOCIATIONS AND INSTITUTIONS (IFLA) is the trusted global voice for the library and information profession. IFLA's aims are to promote high standards of provision and delivery of library and information services, encourage widespread understanding of the value of good library and information services and represent the interests of our members throughout the world. IFLA drives equitable access to information and knowledge for all. To achieve its goals, IFLA works in close cooperation with its strategic partners in the cultural heritage sector, the scientific world and beyond. Our Asia and Oceania Regional Office based in the National Library of Singapore is a very important part of IFLA and strengthens our capacity to work strategically and effectively in the region.

The 2013 IFLA World Library and Information Congress (WLIC) in Singapore is a special event for me as it marks the start of my two-year term of office as IFLA President. My Presidential theme is "Strong Libraries, Strong Societies". Libraries exert an impact on society and development by fostering equal opportunities and access to lifelong learning and education, research and innovation, and culture and recreation for all. In this way libraries can contribute to building stronger communities and societies.

Strong societies can be defined as ones that consist of informed citizens who participate actively in their community and promote sustainable development, intellectual and economic growth and general well-being. A strong society is open and free, giving its citizens the chance to use all their knowledge, abilities and skills to benefit their and their families' lives, the community they live in and, in turn, the entire society. The theme supports and promotes the IFLA Strategic Plan for 2010 to 2015 and its four strategic directions. The theme also recognises the five key initiatives: Digital Content Programme, International Leadership Programme, Outreach for Advocacy, Cultural Heritage Risk Management, and Multilingualism.

One of the actions derived from the key initiatives is the IFLA Trend Report, which will be launched at this year's IFLA Congress. We have planned a number of activities in the region over the next year to promote the IFLA Trend Report as well as add a regional focus. The report will provide detailed options for libraries to position themselves internationally within the evolving digital information environment. The report will be a useful resource for librarians, policymakers and the public, and help all stakeholders better understand the role of libraries in the digital age.

I look forward to collaborating with our regional colleagues over the next two years to advance our key initiatives as we continue on from the WLIC 2013 theme of "Future Libraries: Infinite Possibilities" towards "Strong Libraries, Strong Societies".

Sinikka Sipilä IFLA President-elect



### **OVER THE YEARS, LIBRARIES HAVE EVOLVED**

from simply being gatekeepers of knowledge to being gateways of discovery and learning. Libraries not only provide access to materials that support literacy but also actively facilitate an environment of innovation and creativity that is open and free to all. The positive value that libraries add to the communities they serve is one that is widely acknowledged but hard to quantify. Today, in the face of shrinking budgets and competing needs for funding, libraries, more than ever before, need to articulate how they will continue to be relevant and meaningful to the lives of the people they serve.

In Singapore, libraries hold a special place in the hearts of ordinary citizens. It is a place where memories are grown and nurtured. From the time a child is born until his silver years, from exploring other worlds through storytelling and books to taking instruction in iPad and social media classes as a senior citizen, the library is like a companion who stays for life regardless of one's background. The idea of being a companion for life is part of the National Library Board's (NLB) vision of creating libraries for life.

The challenge for us as a library is to continue to retain our value as changing media and technologies quicken the pace of the digital transformation. While we have adapted by integrating these newer technologies, from growing our eBooks collection to developing mobile technologies, we recognise that this is not enough. Beyond riding the digital trends, we have to show that libraries can offer much more to the community; we build connections where people would otherwise not find them, between streams of knowledge, between fields of interests and between people and organisations who would otherwise not have come together.

Libraries around the world have realised that they need to innovate to stay

relevant and valued. In our most recently opened public library, Library@Chinatown, NLB endeavoured to create a new model that would not only be sustainable in terms of funding, but would also allow people to take a share in the ownership of the library.

This model is what we fondly refer to as the "heart-head-hands" giving model. Library@Chinatown brought together corporate and philanthropic partners; the "hearts" who sponsored the set up and operation costs; domain experts, the "heads" who provided their expertise in helping us curate a Chinese arts and culture collection; and most importantly, the "hands" who are volunteers who keep the library running. This model brings together the community in a shared project where each contributed what they could in a meaningful way to bring about a greater good that benefits everyone. The result is that the library becomes part of everyone's social consciousness, an institution that everyone has a responsibility to protect.

As Singapore is a young country, institutions like libraries perform important community functions that contribute to the crystallisation of our identity as a nation. Libraries provide spaces for people from all walks of life to come together and eventually, the time spent in libraries becomes part of our shared experience. A nation is built out of strong communities and in land-scarce Singapore, such free community spaces have become even more precious to citizens. Our shared literature, our shared desire to acquire knowledge and the opportunity to meet others who have similar interests and needs are all facilitated by libraries.

The Singapore Memory Project, a nationwide initiative that aims to collect the precious moments and memories related to Singapore, is one example of how NLB has tried to galvanise the links between

the people of Singapore. By engaging people to contribute their memories, the library fosters social cohesion through people's desire to connect with one another through a shared sense of the past. Such projects allow the library to not only become a gateway of knowledge but also act as a cultural repository showing where we have come from as a people. The past contextualises our present and paves the way for the future.

NLB is excited about the future. We have come a long way from the days of brick and mortar buildings to a multi-dimensional glass and steel library that fulfils a variety of purposes. While digital technology has changed the landscape within which libraries operate and libraries all round the world have been forced to negotiate the balance between the physical and digital libraries, it also presents a new opportunity for libraries to re-examine what they mean to the communities they serve. From the creation of inspiring spaces and the development of cutting-edge digital technology, libraries have been preparing to meet the future. How libraries look and what libraries do may change but the inherent desire to create better lives for people through discovery, learning and creation endures.

I hope this issue of *BiblioAsia* will inspire you with the stories contained within as they affirm the value of libraries, from what they presently do for the community as well as what they plan—and eventually accomplish—for the future.

**Elaine Ng** is the chief executive officer of the National Library Board of Singapore.



More than just repositories of knowledge, libraries are spaces of innovation and collaboration with the power to change society.

e live in times of unprecedented and rapid change — in technology, politics, economics and other spheres — which has profoundly impacted all aspects of society, including libraries.

Because of the current transformative changes underway, and because of their impact on libraries, my theme as International Federation of Library Associations and Institutions (IFLA) President is *Libraries—A Force for Change*, which incorporates four key principles: inclusion, transformation, innovation and convergence.

First, we must remain inclusive—serving, and be seen to be serving all—without judgment, prejudice or bias. By democratising access to information, libraries can empower individuals to learn freely, improve their lives and create new knowledge.

Second, we must promote the idea that libraries have the potential to transform lives — and society. It often starts with one person, one book and one helping hand in a library or drop-in centre. And it extends through our ability to encourage dialogue by being community-centred hubs and interactive learning centres — as well as supporting research and study.

Third, our libraries should innovate by harnessing the power and potential of today's changing technologies, and through this, maintain our role of providing access to information — irrespective of its format or method of delivery.

And lastly, libraries must remain proactive in terms of convergence of resources and initiatives. Through collaboration and convergence, we can reach across disciplines — uniting libraries, museums and archives, and others involved in the field of documentary heritage.

These four key principles — inclusion, transformation, innovation and convergence — guide libraries of all kinds as they seek to redefine their roles and services in the digital world.

### TECHNOLOGY TO GALVANISE CHANGE

Today's world is being transformed by a host of factors, many beyond our control. Certainly, the economic downturn over the past few years is one such factor that has affected developing and developed countries around the world. The downturn shows little sign of dissipating, and many nations are struggling to find solutions for the well-being of their citizens.

In addition, over the past decade we have seen the rise of the "knowledge society", where learning equals earning. Our economies are increasingly dependent on the ability of our citizens and institutions to innovate; indeed, the Organisation for Economic Co-operation and Development (OECD) has recognised "knowledge" as a major driver of productivity and economic growth. <sup>1</sup>

Libraries can play a key role in the development of an informed and educated citizenry, and therefore, a knowledge society. The evolution of information and communication technologies has changed the way we provide and share knowledge. The potent combination of handheld mobile devices, wireless connectivity, powerful search engines and online communities has changed the world — not just in terms of information exchange and access, but of social interaction as well.

New technology is transforming the way we interact with our governments, institutions and each other. We need look no further than the recent rise to power of Italy's Five Star Movement, led by Beppe Grillo.³ Using social media to criticise the political and economic policies of the government, Grillo's party won almost 26 percent of the vote in Italy's national elections in February, holding the balance of power. It is an increasingly common example of how technology can mobilise, influence and persuade civic actions. It is also an example of how we can change communities, 140 characters at a time.

No longer do we have a society where communications are controlled by a few, but rather are accessible to many. No longer do we have to chase information; information is chasing us. Instead of technology making libraries obsolete as some had predicted, technology has become a catalyst for transforming libraries into vital intellectual centres.

### DIGITISATION & THE BORDERLESS SOCIETY

But no amount of technology can replace what libraries have always done — connect people with information, with each other

Dr Ingrid Parent is the president of IFLA and the University Librarian at the University of British Columbia, Canada. She was the directorgeneral of Acquisitions and Bibliographic Services at the former National Library of Canada and the assistant deputy minister for documentary heritage at Library and Archives Canada.

and with their communities. Take digitisation as an example. The reason we digitise is to improve access to material for our communities. But digitisation requires collaboration with a variety of stakeholders on a number of fronts: the community, to help us identify what is in demand; other libraries, to avoid duplication of efforts and to pool resources; other digitisation initiatives, to contribute our content to broader or international collections; and technology experts who help us digitise and format the content.

One of the earliest and most complex multinational digitisation projects is the Europeana initiative, which provides a single access point to millions of books, paintings, films, museum objects and archival records that have been digitised throughout Europe.

Europeana is a great example of what can happen when organisations collaborate. There are more than 2,000 organisations participating in the initiative, ranging from small cultural institutions to large national aggregators, The Irving K. Barber Learning Centre, part of the Library system at the University of British Columbia, not only draws community members in—it also reaches out. It is a focal point of education for students and faculty at the university and supports lifelong learning for people throughout the province of British Columbia by providing virtual access to the collections and resources of the library and university. It also offers other services such as training programmes and physical and virtual events such as speakers' series.

The Centre also funds digitisation initiatives for communities wishing to digitise and preserve their local histories, helping ensure the preservation of local and unique archival material. One of these community projects, Indigitization, includes the development of an online toolkit for the digitisation of aboriginal cultural materials, helping to preserve indigenous history and culture for future generations.

We are not alone in offering these types of community services. For example,



from data providers to technology firms. There are numerous other examples of collaboration that we could point to—such as the Internet Archive, the Confederation of Open Access Repositories and the World Newspaper Archive. In Asia, a similar collaborative digitisation project with various national libraries is also underway. The recently launched National Digital Public Library of America is another example.

This greater access to information creates a borderless society, one which moves beyond the physical walls of a library and other organisations to develop stronger ties with user communities.

many libraries in Singapore are doing important outreach work, including reading projects in the community and mobile library services such as Molly, a library in a bus. Through embedded librarianship models, librarians can move from a traditional support role to much greater participation and closer partnerships with their users, whether they are in a laboratory, classroom, city space or elsewhere.

### **GLOBAL ISSUES AND IFLA'S ROLE**

Globalisation has put pressure on governments to develop more cohesive and interrelated policies and regulatory environ-

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ments worldwide. Increasingly, important policies that affect our local library services are being addressed, debated and enforced at the international level via bilateral and multilateral agreements.

A good example of this took place last September, when the UNESCO conference — "Memory of the World in the Digital Age: Digitization and Preservation" - took place in Vancouver, British Columbia. IFLA participated in planning this conference, which featured public decision-makers, librarians, scholars and technology experts sharing their insights on digital preservation, records management, intellectual rights and much more. The conference culminated with a declaration of recommendations - a significant accomplishment.4 This was an instance where lobbying by special interest groups and collective efforts around international advocacy for library issues were absolutely critical.

Another area in which IFLA has been very active in the past several years has involved copyright limitations and exceptions, most notably at the World Intellectual Property Organization (WIPO). The treaties adopted by WIPO define and guide the development of copyright laws in countries across the globe. Many countries are in the process of updating their copyright laws and look to WIPO for an appropriate framework.

IFLA has advocated strongly to gain support at WIPO and engage in discussions around the merits of copyright exceptions and limitations for libraries and archives. In November 2011, I was invited to speak on behalf of the world's libraries at the WIPO Standing Committee on Copyright and Related Rights meeting. Library delegations have since participated in subsequent meetings of the Standing Committee, and other multilateral discussions have taken place this year with IFLA support and representation.

Additional global issues affecting IFLA members include the challenges and opportunities facing libraries around e-book lending. In March 2013, *The Economist* interviewed several IFLA members about e-lending principles for the licensing and purchasing of e-books that all libraries can use in their respective jurisdictions. These principles are available on the IFLA website<sup>5</sup> (and undoubtedly the conversations around e-book lending will continue).

Understanding these global issues within our profession is one of the many benefits we have as members of IFLA.



Access to industry research and studies help build the capacity of the association, which is why I am delighted that the inaugural *IFLA Trend Report* will launch in August 2013 at the World Library and Information Congress in Singapore. For the past year, IFLA has been gathering input from experts across various fields in order to prepare comprehensive, yet evolving, views of the environment that will impact libraries in the future.

As president of IFLA, I am truly fortunate to witness first-hand how libraries are positively and proactively responding to the changes around them. We must continue to develop our digital collections and safeguard the knowledge legacies of the past while ensuring accessibility for the future. Librarians must harness new tools for information creation and discovery, and configure our services and spaces to meet our users' evolving needs. Libraries will need to respond to and support new trends as they evolve, such as massive open online courses (MOOCs), which are already impacting education in Singapore, and elsewhere in the world. We will need to continue to provide innovative spaces for people to meet, engage and access new technologies. And we will need to do all of this while we bring our services to our patrons, wherever they might spend their time — whether it is on social media, in their homes or in the library.

Libraries play an essential role in the life of communities and academic institutions, and in human development. Libraries are not just cultural institutions; they contribute to the economic well-being of society. Accordingly, the library community must continue to advocate on behalf of

its users for openness and less restrictive policies and legislation regarding the access and use of content.

While the nature and shape of libraries continue to evolve and respond to the changing needs of users, what must endure are the underlying values that libraries bring to our societies — the values of equitable access to information, networking and the sharing of expertise and resources, and a trusted brand.

For its part, IFLA will continue to work strategically at the international level to ensure the library perspective is heard. The association aims to foster cross-disciplinary partnerships, influence decision-makers and build the capacity of its members to advocate for themselves locally. Libraries and their associations at the local, national and international levels are interdependent; working together, our voices become stronger. Our joint efforts are critical for ensuring that the library perspective is part of the public policy debate around the world.

Change can be difficult. It challenges our traditional assumptions and practices. But change can also be very exciting, as it offers opportunities to redefine our roles in society and reinvent who we are and what we offer.

As my IFLA presidency comes to an end,I believe there is a very positive future for libraries as they adapt to the changes around them and become more resilient and integrated into their environments. By being proactive and not remaining complacent,libraries can indeed be a force for change. For those who are attending the conference in Singapore this August, I look forward to continuing this discus-

sion. The conference is a wonderful opportunity for more than 3,000 global members to hear from leading experts on topics that matter to you. There will be many stimulating conversations and ideas to explore with each other. On behalf of IFLA, I look forward to meeting you in Singapore.

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## 建设覆盖城乡的数字图书馆服务体系 THE DIGITAL LIBRAL is a public digital

## China: Planning and Implementation of the Digital Library Promotion Project

周和平,中国国家图书馆馆长(副部长级)、国家古籍保护中心主任、中国图书馆学会名誉理事长。

Zhou Heping is the director of the National Library of China (Vice Minister Level), director of China National Center for Preservation & Conservation of Ancient Books, and the honorary president of the Library Society of China.

### THE DIGITAL LIBRARY PROMOTION PROJECT

is a public digital culture project that started in May 2011. It is sponsored by the Ministry of Culture of China and Ministry of Finance of China and administered by the National Library of China. The Promotion Project focuses on breaking down barriers between different industries and libraries in disparate places with technology, as well as building interconnected digital library systems and resource warehouses. These infrastructure developments provide digital cultural services with the aid of omnimedia, and promote both the service ability and service level of local libraries, which will propel the library forward. The Promotion Project has plans to build "One Warehouse, One Network and Three Platforms". This means building several digital resource construction centres, preservation centres and service centres; graded and distributed cultural public resource warehouses to achieve centralised planning, scheduling and management; a cultural virtual network whose core node is the national digital library and other main nodes like provincial digital libraries through network channels such as the Internet, mobile communication networks, broadcast television and satellite networks, as well as modern network technologies such as VPN; a centralised show platform of Chinese culture (a lifelong learning platform), and an international culture communication platform. Strongly supported by the central and local governments, the Promotion Project has made progress in virtual network building, hardware and software platform deployment, digital resources construction, new media services, promotion and training.

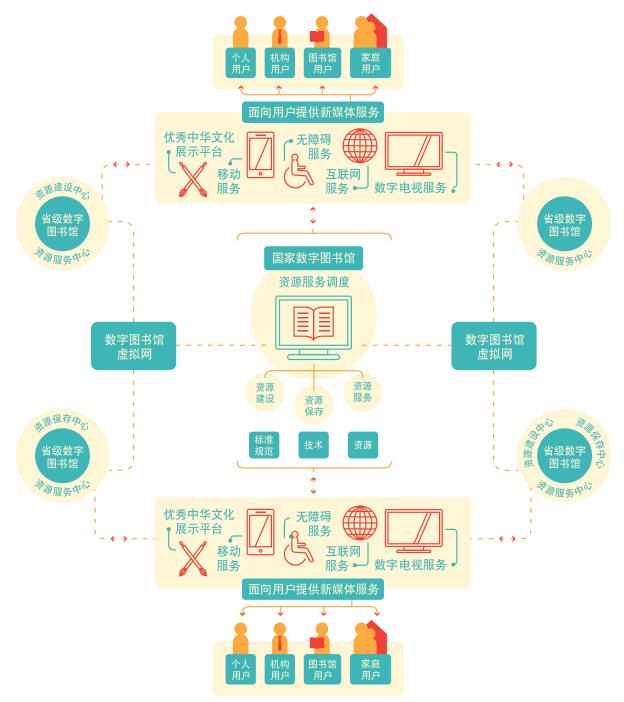


图1 中国数字图书馆推广工程总体架构图

改革开放以来,中国图书馆事业取得快速发展,图书馆服务覆盖农村乡镇和城市社区,一个由国家图书馆、公共图书馆、高校图书馆、专业图书馆、学校图书馆和企事业单位图书馆等各级各类图书馆组成的图书馆体系逐步完善。在此基础上,上世纪90年代中期,随着网络技术和信息技术的发展,中国图书馆界开始了数字图书馆建设的实践探索。

1996年,由中国国家图书馆主持的第一个数字图书馆研究项目一"中国试验型数字式图书馆"项目启动,之后,围绕数字图书馆技术,图书馆工作者与研究人员联合开展了一系列研究。2001年,国务院批准立项了中国

第一个国家级数字图书馆建设项目,即由中国国家图书馆主持建设的国家数字图书馆工程。与此同时,面向高等院校师生的中国高等教育数字图书馆、面向科研人员的国家科学数字图书馆和国家科技数字图书馆也组继启动。各地方政府也纷纷将数字图书馆建设纳入本地区信息化建设和公共文化服务体系建设的总体规划,积极部署推动本区域数字图书馆的建设和发展,建设了一批省、市、县级数字图书馆。

经过十几年的发展,中国的数字图书馆在网络平台建设、关键技术研发、数字资源建设与服务方面均取得重要进展,初步形成了由全国性、区域性和行业性数字图书馆组成的数字图书馆服务体系。在此基础

上,2010年12月,中国国家图书馆提出了在全国实施"数字图书馆推广工程"的建议,旨在建设一个全国性数字图书馆服务网络。2011年5月,工程获得中国财政部和文化部的批准,正式实施。

推广工程的建设目标,是通过技术手段连通全国已建成和正在建设的各级各类数字图书馆系统,整合全国各图书馆的信息资源,构建全国统一的数字资源共享和协同服务网络,以更好地满足人们通过各种媒体获取信息的需求,从而提升图书馆的数字化服务能力和水平,推动各级各类图书馆快速进入数字图书馆发展阶段(工程总体设计架构见图1)。

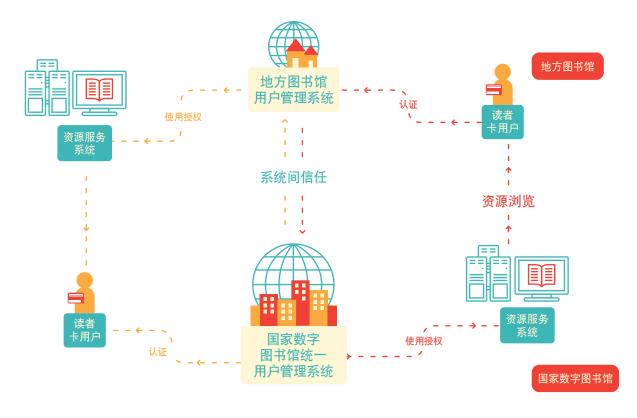


图2数字图书馆推广工程统一用户管理服务示意图

### 工程的主要建设内容包括以下几个方面: 一)建设标准化的硬件平台

为了保证推广工程各节点基本功能的实现,工程制订了硬件配置标准,在省级图书馆和市级图书馆建设标准化的硬件平台。其中必配设备由中央和地方两级财政投入,选配设备由各地区根据当地的实际情况选择配备。目前,全国已有24家省馆、86家市馆的硬件设备达到推广工程配置标准,各地硬件基础条件得到了大幅提升。

### 二)建设开放互连的软件平台

工程将统一搭建由文献数字化系统、数字资源组织系统、数字资源发布与服务系统、长期保存系统、统一用户管理系统、唯一标系统、版权管理系统等核心系统构成的统一软件平台,并提供开放接口,支持各馆的已有系统通过二次开发与平台实现无接,共享平台资源与服务。目前,上述各条系统大部分已经由国家图书馆组织完成是,共享平台资源与服务。目前,组织完成,并逐步在各地图书馆部署运行。其中,统一用户管理系统(见图2)已经在全型13家省、市级图书馆成功部署,实现了任何一个馆注册,都能够同时成为其它馆的注册,都能够同时成为其它馆的各种应用服务。

### 三)建设高度共享的资源体系

工程将联合全国各级各类图书馆,建立资源共建共享机制,实现数字资源的统一规划、

统一登记、联合建设和协同服务。截至2012 年底,已有20家公共图书馆的1615条自建资源元数据实现了统一登记。在此基础上,国家数字图书馆文津搜索系统正式上线运行,该系统整合了全国各图书馆的60多个资源库、近2亿条元数据,向用户提供快速信息定位服务。

### 四)建设覆盖全媒体的服务平台

工程将建立统一的服务平台, 在这个平台上 高度集成各级各类图书馆所能够提供的资 源,使用户能够随时随地通过手机、数字电 视、移动电视等新媒体,方便快捷地获取任 何一个图书馆的资源与服务。2012年, 国家 图书馆与常州图书馆、绍兴图书馆、天津泰 达图书馆合作,帮助这些地区实现了数字电 视服务; 2013年, 工程开始进行"移动阅读 平台"的试点部署,采用"云服务"理念,面 向全国图书馆及图书馆用户提供移动资源云 服务。此外, 工程还专门建设了针对少年儿 童的"校外课堂"、"我爱动漫"以及针对视 障群体的"有声读物"、"在线讲座"等特色 资源,这些资源正在逐步通过推广工程的多 媒体服务平台,面向全国少年儿童和视障群 体提供服务。

五)建设基于数字资源生命周期的标准规范 体系。

国家数字图书馆工程已经围绕数字资源生命 周期建设了一套完整的,用以支持数字资源 创建、描述、组织、发布、服务以及长期保存 等各个环节的标准规范体系,在此基础上,推广工程进一步从服务、管理和技术等方面对这一体系进行拓展,为图书馆间的资源共建、服务共享和管理协同提供基本保障(见图3)。

数字图书馆是传统图书馆在网络环境下的新的发展形态和发展阶段,它与传统图书馆相互融合、相互支撑、相互促进、共同发展。在数字图书馆环境下,图书馆的核心业务功能依然是收集、加工、组织、传播和保存信息,只是面对的资源类型更为丰富,服务的渠道和方式更为多样。为此,推广工程建设的一个重要原则,是基于图书馆业务全流程进行设计,全面整合图书馆的传统业务和发字图书馆业务,帮助中国的图书馆实现从传统图书馆向复合图书馆的顺利转型,充分利用数字图书馆技术,使图书馆的知识组织和服务能力得到全面提升。

根据工程规划,2015年,中国各地区数字图书馆系统的省-市-县三级虚拟网络将全面贯通,各应用系统平台也将实现全国范围的互连互通,一个覆盖城乡的数字图书馆服务网络终将形成。届时,来自中国各地区、各行业图书馆的丰富而各具特色的数字资源与服务都将汇聚到推广工程的统一平台上来,并利用互联网、移动通信网、广播电视网等多种媒体渠道,走进千家万户,走到每一位社会公众身边。

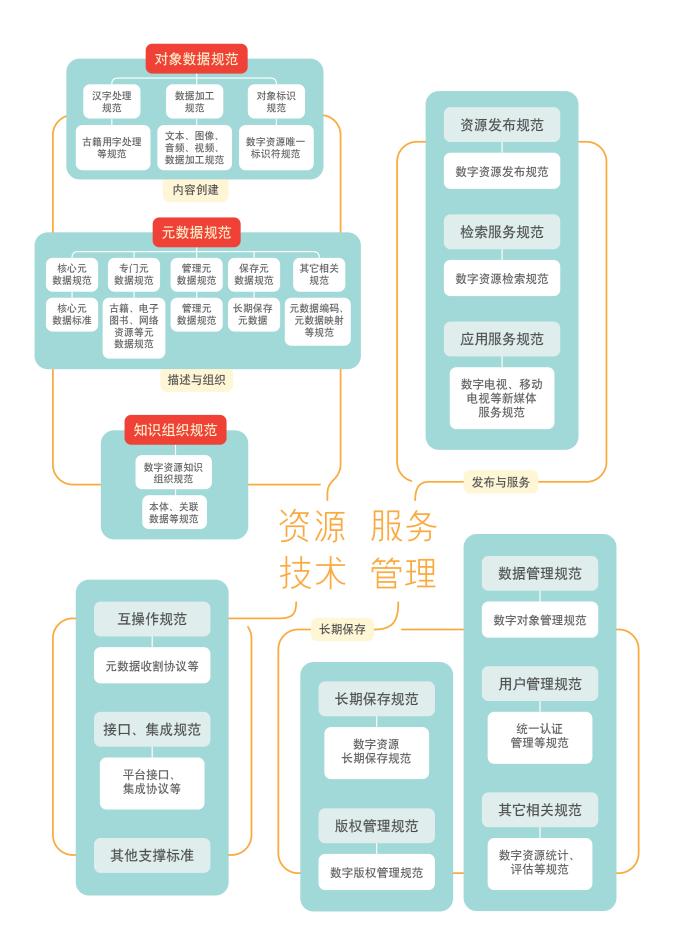


图3 数字图书馆推广工程标准规范体系框架

# Books that Shaped the World

The importance of books lies in its substance and not its form. Whether on page or in pixel, the ideas perpetuated by books will continue to influence people and communities.

OVER A YEAR AGO. AS PART OF THE LEAD-UP

to the first International Summit of the Book in 2012, the Library of Congress embarked on a project to create a list of books, principally titles written by Americans that have shaped America in various crucial ways. The list was intended to spark a national conversation on books that have influenced American lives and society, whether they appeared on this initial list or not. This project was inspired by work the British Museum did a few years ago to identify 100 objects that shaped the world.

For our project, Library of Congress curators identified the books and displayed copies of them in an exhibition. Our list of "Books That Shaped America" generated tremendous reactions from all around the country. People weighed in, as we had hoped, and took part in a discussion of the works that were on our list as well as books that were not on our list that they felt ought to be. Through our website, we invited people to send us their comments, including nominations of books that they felt should be on the list. This generated thousands of responses and persuaded us to make additions to the list, which now totals 100 books.

Beyond shaping America, books have created civilisation in a very real sense. When one goes from scrolls to codexes,

books with bound pages with a table of contents and an index, it is possible to use the latter as an introduction to critical thought. It represents a whole new phase that first began with the manuscript way back in the fourth century.

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### **BOOKS THAT HAVE SHAPED US**

What we might call the founding books of civilisation are in many ways the books of the great religions. These include the Christian Bible, much of which is based on the Jewish Bible. Then there is the Koran, the last of the great prophetic, monotheistic books. The Chinese and the Indian traditions are also part of the basis of world civilisation. There is the Chinese Book of Lessons that contains Confucius' Analects, which was the basis of education in China, and also the basis for the civil service exams taken by Chinese officials for a thousand years. India produced the Ramayana and Mahabharata, the two great

This article, by the staff at the Library of Congress in Washington D.C., US, comprises excerpts of an interview with Dr James H. Billington. Dr Billington is the 13th Librarian of Congress and was sworn in in 1987.



Hindu epics and fundamental doctrines originally published in Sanskrit and translated into the many languages of the Indian subcontinent. These great epic poems, in a way, were the basis of much of Hinduism. Also to be considered is either of Saint Augustine's books, *The Confessions of Saint Augustine* or *The City of God*, which were the basis of medieval thought and the whole concept of another spiritual world. These are all examples of great founding documents of civilisation.

The great founding epics of the Western tradition, Homer's *Iliad* and *Odyssey*, which are almost as old as the oldest Indian and Chinese works, are not to be forgotten. The first work on actual history is *The History of the Peloponnesian War* by Thucydides. I remember, as an undergraduate in college, hearing former Secretary of State General George C. Marshall give a speech, just before he announced the Marshall Plan (officially known as the European Recovery Pro-

gramme, which lasted from 1948 to 1951), saying he had been reading the aforementioned book and that it gave him guidance about the post-war world. Thus, that work of founding importance in Western history retains its importance even today.

In terms of philosophy, one must consider Aristotle's work. It was the basis of the theology of the Latin Church, which penetrated from Greece into the Islamic world, then into the Christian world and Jewish thought. All kinds of secular thought, and even early governmental thinking in the West, had its roots in the philosophical works of Aristotle. If I had to choose a particular work of Aristotle as being especially influential, I would select the edition of his work that was published in Venice in the early modern period.

When considering the founding books of civilisation, the rise of science must be taken into account. For example, there are the fundamental works of Copernicus, but



perhaps the most important of all, in the history of science, are the principles of natural philosophy by Isaac Newton, who gave us the law of gravity and so much else.

In terms of social science, one has to go to the Muslim world and Ibn Khaldun. Ibn Khaldun was born in what is now southern Spain and ended up being a founding figure in the northern African world. His *Prolegomena* and his longer seven volumes that were associated with it are really the first world history. He wrote a history that was also a treatise on

Frederick Douglass (1845)

BENJAMIN FRANKLIN, Experiments and
Observations on Electricity (1751)
BENJAMIN FRANKLIN, Poor Richard Improved (1732)
and The Way to Wealth (1785)
THOMAS PAINE, Common Sense (1776)
NOAH WEBSTER, A Grammatical Institute of the
English Language (1783)
The Federalist (1787)
A Curious Hieroglyphick Bible (1788)
CHRISTOPHER COLLES, A Survey of the Roads of the
United States of America (1789)
BENJAMIN FRANKLIN, The Private Life of the Late
Benjamin Franklin, LL.D. (1793)

AMELIA SIMMONS, American Cookery (1796)

New England Primer (1802)

MERIWETHER LEWIS, History of the Expedition Under the Command of the Captains Lewis and Clark (1814)

WASHINGTON IRVING, The Legend of Sleepy
Hollow (1820)

WILLIAM HOLMES MCGUFFEY, McGuffey's Newly
Revised Eclectic Primer (1836)

SAMUEL GOODRICH, Peter Parley's Universal History (1837)

FREDERICK DOUGLASS, Narrative of the Life of

NATHANIEL HAWTHORNE, The Scarlet Letter (1850) HERMAN MELVILLE, Moby-Dick; or, the Whale (1851) HARRIET BEECHER STOWE, Uncle Tom's Cabin (1852) HARRIET BEECHER STOWE, The Key to Uncle Tom's Cabin (1853) HENRY DAVID THOREAU, Walden; or, Life in the Woods (1854) WALT WHITMAN, Leaves of Grass (1855) LOUISA MAY ALCOTT, The Mysterious Key (1867) LOUISA MAY ALCOTT, Little Women, or, Meg, Jo, Beth, and Amy (1868) HORATIO ALGER JR., Mark, the Match Boy (1869) CATHARINE E. BEECHER AND HARRIET BEECHER STOWE, The American Woman's Home (1869) MARK TWAIN, Adventures of Huckleberry Finn (1884) EMILY DICKINSON, Poems (1890) EMILY DICKINSON, Slant of Light = Sesgo de Luz (1890) JACOB RIIS, How the Other Half Lives (1890)

STEPHEN CRANE, The Red Badge of Courage (1895)

### Balks that Shaped America





















sociology, geology and an analysis of the movement from rurals to cities. He was the first great world historian. Arnold Toynbee said Khaldun was the greatest world historian of all, but alas he is not very well known. When I was teaching world history, I always began with a reading of *Prolegomena* and students were astonished that anyone could write that way in the 14th century.

Some of the founding great novels have had a hand in influencing the modern world, particularly Cervantes' *Don Quixote*, which was beloved not only in Spain but throughout the great Spanish

empire. Another work that helped to define and usher in the modern world was the *Code Napoléon*.

A great founding book that first explained Africa, particularly northern Africa, on a broad scale was *Della Descrittione dell'Africa* by Leo Africanus. Africanus, a convert to Christianity, spent a great deal of time in Timbuktu, a city that is known as a great repository of African, French and Muslim-Arabic cultures, as well as a great centre of learning. Africanus wrote about Timbuktu and other parts of Africa. *Della Descrittione dell'Africa* was called a cosmography and a geog-

raphy. In its original version, it was published in both Italian and Arabic, pointing out the many links in the Mediterranean world among the three great monotheistic religions and also the different languages.

Adam Smith's *The Wealth of Nations* highlights the beginning of economics and the idea of a free, uncontrolled economy. And of course, Karl Marx's *Das Kapital*, which held a very different view, must be mentioned.

In the world of drama, one might pick something from Sophocles. And one would also have to pick something from Shakespeare. For example, Hamlet might be selected because it created the most controversy and discussion, and contains the most psychoanalysis. Furthermore, it has some of the greatest soliloquies in the English language or in any language. In terms of the great novels, I would pick Tolstoy's War and Peace because it deals with the great problem of the modern state — war and peace. It also deals with family life and the mystery of history as distinguished from the analysis of history that was received from earlier historians, such as Thucydides or even Khaldun.

In addition to those mentioned so far, there is a whole range of works by other thinkers one would want to include such



L. FRANK BAUM, The Wonderful Wizard of Oz (1900) SARAH H. BRADFORD, Harriet, the Moses of Her People (1901)

JACK LONDON, The Call of the Wild (1903)
W. E. B. DU BOIS, The Souls of Black Folk (1903)
IDA TARBELL, The History of Standard Oil (1904)
UPTON SINCLAIR, The Jungle (1906)
HENRY ADAMS, The Education of Henry Adams
(1907)

WILLIAM JAMES, Pragmatism (1907)
ZANE GREY, Riders of the Purple Sage (1912)
EDGAR RICE BURROUGHS, Tarzan of the Apes (1914)
MARGARET SANGER, Family Limitation (1914)
WILLIAM CARLOS WILLIAMS, Spring and All (1923)
ROBERT FROST, New Hampshire (1923)
F. SCOTT FITZGERALD, The Great Gatsby (1925)
LANGSTON HUGHES, The Weary Blues (1925)
WILLIAM FAULKNER, The Sound and the Fury (1929)
DASHIELL HAMMETT, Red Harvest (1929)
IRMA ROMBAUER, Joy of Cooking (1931)
MARGARET MITCHELL, Gone With the Wind (1936)
DALE CARNEGIE, How to Win Friends and Influence
People (1936)

ZORA NEALE HURSTON, Their Eyes Were Watching God (1937)

FEDERAL WRITERS' PROJECT, Idaho: A Guide in Word and Pictures (1937)

THORNTON WILDER, Our Town: A Play (1938) JOHN STEINBECK, The Grapes of Wrath (1939) Alcoholics Anonymous (1939)

ERNEST HEMINGWAY, For Whom the Bell Tolls (1940) RICHARD WRIGHT, Native Son (1940)

BETTY SMITH, A Tree Grows in Brooklyn (1943)
BENJAMIN A. BOTKIN, A Treasury of American
Folklore (1944)

GWENDOLYN BROOKS, A Street in Bronzeville (1945) BENJAMIN SPOCK, The Common Sense Book of Baby and Child Care (1946)

EUGENE O'NEILL, The Iceman Cometh (1946)
MARGARET WISE BROWN, Goodnight Moon (1947)
TENNESSEE WILLIAMS, A Streetcar Named Desire (1947)

ALFRED C. KINSEY, Sexual Behavior in the Human Male (1948)

### 1950-2000

J. D. SALINGER, The Catcher in the Rye (1951)
RALPH ELLISON, Invisible Man (1952)
E. B. WHITE, Charlotte's Web (1952)
RAY BRADBURY, Fahrenheit 451 (1953)
ALLEN GINSBERG, Howl (1956)
AYN RAND, Atlas Shrugged (1957)
DR. SEUSS, The Cat in the Hat (1957)
JACK KEROUAC, On the Road (1957)
HARPER LEE, To Kill a Mockingbird (1960)
JOSEPH HELLER, Catch-22 (1961)
ROBERT E. HEINLEIN, Stranger in a Strange Land (1961)
EZRA JACK KEATS, The Snowy Day (1962)

RACHEL CARSON, Silent Spring (1962)
MAURICE SENDAK, Where the Wild Things Are (1963)
JAMES BALDWIN, The Fire Next Time (1963)
BETTY FRIEDAN, The Feminine Mystique (1963)
MALCOLM X AND ALEX HALEY, The Autobiography of
Malcolm X (1966)

Malcolm X (1965)

RALPH NADER, Unsafe at Any Speed (1965)

TRUMAN CAPOTE, In Cold Blood (1966)

JAMES D. WATSON. The Double Helix (1968)

JAMES D. WATSON, The Double Helix (1968) DEE BROWN, Bury My Heart at Wounded Knee (1970) BOSTON WOMEN'S HEALTH BOOK COLLECTIVE, Our Bodies, Ourselves (1971)

CARL SAGAN, Cosmos (1980) TONI MORRISON, Beloved (1987)

RANDY SHILTS, And the Band Played On (1987) CÉSAR CHÁVEZ, The Words of César Chávez (2002)

Access the list at: http://www.loc.gov/bookfest/books-that-shaped-america/















as Sigmund Freud's *The Interpretation of Dreams*. Indeed, Freudian concepts have become so familiar that we forget how widespread and how important they are.

These are some of the people whose books have shaped the world. It is important to remember that the defining thing about a book is its length, which produces a cumulative impact that is distinguished from a talking point, an argument, or any other use of language for some small, pointed purpose. The book's length is the important thing, regardless of whether it is read as a codex or on a Kindle.

Now we have the digital universe, but we also have the possibility and the importance of the book-length object. For us at the Library of Congress, the crucial challenge and opportunity is to integrate the old with the new, keeping them all together as different forms of knowledge, creativity and human expression, while retaining the values of the book culture that include the value of dialogue and argument, and the idea of cumulative knowledge.

This is what you get at libraries, which are consolidations of the different forms of creativity and knowledge. And this is what we need in the future, wherever we go: new techniques for holding information to supplement but never supplant the wisdom and power contained in books and the imagination they can create and feed. Nobody can agree completely on the ten, or the hundred, or the thousand books that most defined and shaped our world, but we must always remember how important they are in our own lives, and how important they are in the broader life of humanity. •

### DIALOGIC CULTURE VIA THE BOOK

As the 2013 International Summit of the Book looks to the future of the book culture and its values, it is helpful to examine the unique role of the book in dialogic culture. Simply put, books enable dialogues between readers and writers. They provide us with voices and experiences from other times and places; affect us with their marvellous stories; and make us more humane and civilised. All this is the beginning of the dialogic culture, which is essential for a democracy and helpful for a dynamic economy.

In talking about present and future dialogues, the impact of technology must be part of the discussion. At the Library of Congress, the whole purpose of our investment in new technology is to affirm the importance of the book culture. It is important to ponder the possibilities of the digital revolution in light of previous technological revolutions' impact on our modes of acquiring information, and communicating and sharing knowledge.

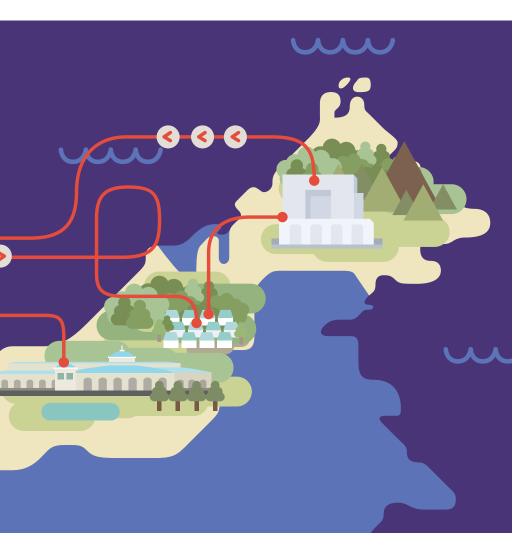
I strongly believe that one technological revolution never really cancels out the previous one. For example, manuscripts carried on long after books were introduced. In modern times, movies have not supplanted theatre, and radio is alive and well along with television.

Now as we look to the future, how will new technologies co-exist with existing ones?



### u-Pustaka: The Malaysian Ubiquitous Library Pilot Project

In pursuit of a knowledge-based society, the National Library of Malaysia has embarked on an ambitious project to connect all its libraries. The first step toward this vision is u-Pustaka, a pilot project changing the way information is accessed.



Dato' Raslin bin Abu Bakar is the director-general of the National Library of Malaysia. He is on the International Advisory Board for WLIC IFLA 2013 and is a CONSAL executive board member. He was conferred the title Dato' by His Royal Highness, Sultan of Pahang in October 2009 for his contributions to society.

he vast reservoir of knowledge resources readily available in libraries is a treasure trove waiting to be discovered and used. Its easy accessibility to the public is crucial in the pursuit of lifelong learning as well as in supporting Malaysia's quest to become a knowledge-based society. People of all ages and social backgrounds have a soft spot and affinity for libraries and this opens up opportunities for the introduction of new services by leveraging on the rapid advances in information and communications technology (ICT) and the Internet.

The Malaysian Ubiquitous Library Pilot Project, u-Pustaka, a collaboration among eight libraries, was spearheaded by the Malaysian Communications and Multimedia Commission (MCMC) as a project under the National Broadband Initiative. Its foundation and concept was based on recommendation 54 of the Knowledge-Based Economy Master Plan that states: "Review and enhance the role and contributions of museums, libraries and think tanks in lifelong learning to

provide resources for learning and should be made more accessible to the majority of citizens". Hence, the project aims to serve the public by delivering innovative library services into every household anytime and anywhere via broadband and other state-of-the-art technology.

### THE TEAM

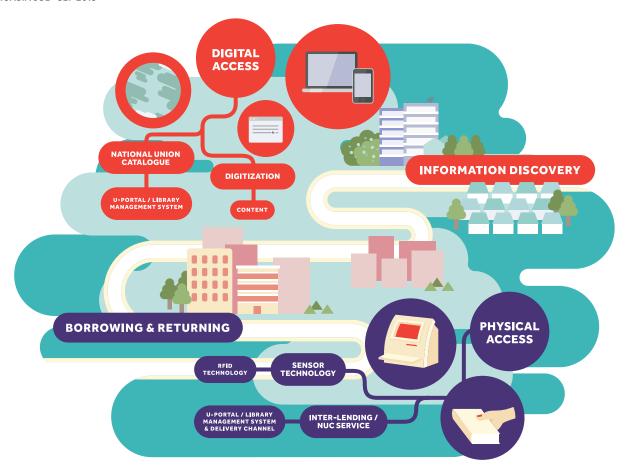
u-Pustaka is an innovative and fitting culmination of the effort, collaboration and synergy by the Ministry of Information Communications and Culture (KPKK) through the MCMC that is supported by the National Library of Malaysia (PNM), together with the u-Pustaka Consortium members, namely, the Selangor State Library Corporation (PPAS), Negeri Sembilan State Library Corporation (PPANS), Pahang State Library Corporation (PPAP), Sarawak State Library (Pustaka), Kuala Lumpur Library (PKL), INTAN Library at Bukit Kiara and the Sabah State Library.

Other government agencies and private institutions also contributed towards the success of the project by offering advice, guidance and sharing of expertise during its implementation. They are the Malaysian Administrative Modernisation and Management Planning Unit (MAMPU), Economic Planning Unit (EPU), National Registration Department, Ministry of Home Affairs (JPN), National Centre of Excellence for Sensor Technology (NEST) at Universiti Putra Malaysia, Pos Malaysia Berhad (PMB), Malaysian Electronic Clearing Corporation Sdn. Bhd. (MyClear), Bank Islam Malaysia Berhad and Touch 'n Go Sdn Bhd.

### MISSION, VISION AND OBJECTIVES

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The mission of u-Pustaka is to foster an engaging lifelong learning experience for an inclusive knowledge-based society in the context of 1Malaysia with the provision of Ubiquitous Library Services (u-Library) in support of the National Broadband Initiative (NBI). This is in line with its vision to ensure that the Malaysian knowledge-based society is engaged in the pursuit of lifelong learning anytime and anywhere. It also hopes to achieve continuous enhancements to the quality of work and life of Malaysians. The nation gains in terms of nation capacity building. Hence, the objectives of u-Pustaka are to make information accessible with the widening of broadband services, Radio



Frequency Identification (RFID) technology, portal technology and content; to establish a library network ecosystem to foster collaboration through inter-lending services, delivery services, e-payment services and virtual access to web publishing, content management and collaboration in expanding our capacities to innovate and create knowledge for the dividend of the nation; to create, share and exchange knowledge to keep communities connected and promote lifelong learning.

### THE CHALLENGES

u-Pustaka is based on a model where seven components, namely broadband infrastructure; the u-Pustaka Portal; the National Union Catalogue; inter-lending; cashless payment; RFID; and the delivery channel are seamlessly integrated.

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The eight libraries involved in the project utilise different Library Management Systems (LMS). Thus, the chosen solution has to address this scenario so that libraries in Malaysia do not have to purchase and install another system to accommodate the project. Compliance to standards such as ANSI/NISO Z39.50 and connectivity to the National Union Cata-

logue, a centralised database comprising over 7.2 million catalogue records from 100 contributing libraries hosted at the National Library of Malaysia, is a major requirement for the project.

Participating libraries had to agree on new policies and guidelines pertaining to matters such as membership, circulation, delivery mechanism and electronic payment. The membership component leverages on MyKad/MyKid/MyPR; the delivery mechanism is entrusted to Pos Malaysia while cashless payment is handled by Touch 'n Go and MEPS.

New equipment comprising RFID tagging workstations, gantries, bookdrops, auto sorters and multipurpose kiosks have been installed while RFID-middleware has been deployed to ensure seamless integration with the existing LMS RFID-Ultra High Frequency (UHF) with spectrum release of 919-923 Mhz and Standard Interface Protocol — Version 2 (SIP2) have been adopted for the project.

### THE IMPLEMENTATION

The u-Pustaka Pilot Project took three years from its conceptualisation in 2008 to its launch in 2011. A project of this magnitude entailed many man-hours spent on

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initial studies, executive talks, readiness assessments, solicitation of funds, concept trials and the tender process, all of which took place between 2008 and 2009. The project kicked off in 2010 with a focus on the U-Library System development, Standard Operating Procedures (SOP) workshops, system implementation as well as promotional and awareness programmes that were carried out until 2011.

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### THE PORTAL

The launch of the u-Pustaka Project on 31 March 2011 ushered in an innovation in library services for Malaysian citizens. The u-Pustaka Portal (http://www.u-library.gov.my) is the centrepiece of the u-Pustaka Project and being the gateway to services and knowledge, the portal is interactive and user-friendly, providing users with an engaging learning and social experience in their pursuit of lifelong learning. Access to services and content is available in both Bahasa Malaysia (Malay language) and English.

Since u-Pustaka is an ubiquitous virtual library, fast, efficient and reliable service delivery for the public is of paramount importance. The portal is made up of four major components, namely in-

### U-PUSTAKA'S INTER-LENDING PROCESS













ter-lending services, web publishing, content management and collaboration. A lot of thought went into designing the system so as to encourage the public to borrow and return books from any of the eight member libraries easily and at their convenience. Members have the choice of having books delivered right to their doorsteps, returning books at the nearest participating library, and engaging in online learning and knowledge sharing anytime as transactions are carried out 24/7 via the portal.

One of the unique features of u-Pustaka is the inter-lending services where the lending collections of the eight participating libraries are made available to u-Pustaka members. In a nutshell, the process of borrowing and returning books, illustrated by the diagram on the left, are as follows:

- 1. Users sign up to be a member via the u-Pustaka Portal. Membership is free of charge.
- 2. Users can search for a book or read reviews to help them find a book they like.
- The availability of the book from participating consortium members and the book's borrowing status will be displayed.
- 4. Members can opt to have the book posted by e-parcel or courier service through Pos Malaysia.
- 5. Payment can then be made either through the Malaysian Electronic Payment System (MEPS) or Touch 'n Go.
- 6. Books can be returned via u-Pustaka bookdrops located at participating libraries or via the e-parcel service where the books will be collected from their homes.

The u-Pustaka Consortium brings knowledge to life via web publishing components by publishing background information, media releases, speeches, information and policies, fact sheets, statistics, top bestsellers, links, RSS and electronic resources, among others.

The content management components provide information specifically for u-Pustaka Members in the form of e-Reviews, e-resources, audio books and dashboard for three segments of membership (adult, youth and children).

As the tag line "Think Knowledge, Think u-Pustaka" implies, a wealth of information and knowledge awaits seekers of knowledge everywhere, beckoning them to visit the u-Pustaka Portal that can be accessed from anywhere and at anytime via the Internet.

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### THE WAY FORWARD

Since its launch on 31 March 2011, public response to the project has been positive and there are now more than 327,000 u-Pustaka members. The portal has been visited by users from more than 100 other countries such as the United States, Australia, the United Kingdom, Germany, Russia, Brazil and Saudi Arabia; and more than 11,000 transactions of books have been circulated via inter-lending. These numbers are expected to rise as the awareness of u-Pustaka increases when more publicity, promotional activities and user awareness programmes are rolled out.

The u-Pustaka pilot project currently involves the participation of just eight libraries, a very small fraction of the over 12,000 public, village, academic, school and special libraries in Malaysia. In the quest to be truly ubiquitous, u-Pustaka services must be extendeded to many more libraries in Malaysia. Synergy among all these libraries is crucial for the success of u-Pustaka and the realisation of its vision of a knowledge-based Malaysia that is engaged in the pursuit of lifelong learning anytime and anywhere for the continuous enhancement to quality of work and life as well as the betterment of society and the nation.

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### Library Networking In Progress The Jogja Experience

Yogyakarta is home to several institutions of higher education and their libraries. As part of its efforts to encourage sharing of information and resources, the city has implemented the Jogja Library for All (JLA).

Dady Rachmananta was the director of the National Library of Indonesia from 2001 to 2009. He is now a senior librarian.

### ONE OF SIX PROVINCES ON THE ISLAND OF JAVA,

Yogyakarta is home to a wealth of objects and rich history originating from the era of the Mataram Sultanate in the 17th century. Centred in the Kotagede District, the birthplace of Yogyakarta, the Sultanate was born from a fusion between the former Yogyakarta Sultanate and the Kadipaten Pakualaman, which was part of the disintegrated Kingdom of Mataram.

This region once played an important role in Indonesian politics when Indonesian leaders moved the seat of the government from Jakarta to Yogyakarta in January 1946. The Dutch army subsequently attacked and seized Yogyakarta in December 1948 and arrested key Indonesian leaders. In March 1949, the Indonesian national army launched an offensive and was able to wrest the city out of Dutch control for a short-lived six hours. This, however, triggered a sequence of events that eventually saw Indonesia gaining independence from Dutch colonial rule in December 1949.

Yogyakarta was conferred a special status, and is referred to as Daerah Istimewa (meaning special region) of Yogyakarta, or DI Yogyakarta or DIY. However, this area is more commonly known as Yogyakarta City, Jogjakarta, or Jogja for short. Whatever its name, this province with the second smallest area after the Special Capital Region of Jakarta not only enjoys a preeminent position in Indonesia but is also a popular haunt for international tourists.

### **JOGJA: THE EDUCATION CITY**

With its magnificent palaces, temples, coastlines, rich art and culture, diverse nature and delicious food, Jogja is usually thought of as a tourist destination, second only to the more famous province of Bali. No less important is the title it bears as a city of education, or a city of students. With its unique position as Indonesia's centre of cultural education, Jogja is shaped by the mix of students that come from various regions of Indonesia or even from other countries.

Supported by its peaceful natural environment, friendly locals and relatively lower cost of living compared to other Indonesian big cities, Jogja is the preferred choice of students pursuing higher education. Statistically, 20 percent of its over 3.5 million productive inhabitants are students who are enrolled in its approximately 137 state and private universities (2011 survey). In a city known for "training and disciplining" prospective leaders of the nation, Jogja boasts an academic atmosphere that encourages study, teaching and personal development.

Jogja sees the university library as playing a vital role in supporting its study and teaching initiatives. In order to meet the information needs of the academic community, including faculty members and students, every library in Jogja has the obligation to supply information resources to all levels, from undergraduate to post graduate studies, and of course, for academic staff. In addition, the library should make reading rooms available for its users, especially for those completing their doctorate studies. Beyond that, the library has to provide an effective circulation service for different categories of users, and an active information service for tertiary students, local industrial institutions and other interested parties.

All these matters have been regulated in the Library Act of 2007, particularly university libraries whose roles, main tasks and functions are to be implemented effectively and transparently. The aim of a university library is in essence to support its parent university. This task can only be achieved through the collections, resources and services offered by the library.

### **RESOURCE SHARING**

Few libraries in the world — including the renowned Library of Congress, British Library and Russian State Library — would claim to have the most complete collection. While national libraries act as repositories of all national imprints, in practice, it is almost impossible for any library to obtain every printed or written publication in its land, much less acquire documents that are published in other countries. Thus, every library needs to make use of their existing collections and collaborate with other libraries to provide a level of satisfactory service to its users.

While it is true that compiling national publications is not the task of a university library, to a certain extent it is also an illustration of how a library should work. A library cannot work alone when developing a library collection. Working in partnership with other library institutions will help provide the most efficient service, especially for small libraries whose ability to build a comprehensive collection of books and resources is rather weak. This

Future librarians will be adept individuals who will come to be seen as subjects of information, instead of becoming objects of information.

resource sharing programme will be effective if each library is able to provide information about its collection to all libraries in the area. In the past, the contents of a union catalogue of books would be updated manually by librarians on a regular basis. However, rapid developments in technology has changed how such work is done.

Today, information technology has taken over this manual exercise by accelerating the speed at which the union catalogue is updated. Information technology has enabled libraries to share information and to facilitate the utilisation of common information resources that are administered by a library network. Moving in this direction, the setting up an integrated network is the main objective of library cooperation in Jogja. The initiative will compile information from all libraries in the region so that the public will have easier and quicker access to resources they need with just a few clicks of the mouse.



Jogja promotes its wealth of information through the library collections of the universities and colleges within the region. Through this common online catalogue, whose information can be accessed openly, it is hoped that all students in Jogja, regardless of the institution they study, will be encouraged to access the collection via the Internet. The availability of a collection that is physically accessible paves the way for the next step, the interlibrary loan (ILL) scheme. This library network is formally known as the Jogja Library for All.

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### **JOGJA'S LIBRARY NETWORK**

Jogja Library for All, JLA or Jogjalib, is in essence a government project, represented by the Jogja Provincial Library (BPAD), with the purpose of making Jogja a province-city known for the quality of its educational institutions. It is also hoped that the JLA will solidify the interlibrary network and serve the information needs of the public. This idea was emphasised by the Governor of Jogja, Sri Sultan Hamengku Buwono X, during the official unveiling of JLA in November 2005.

The early stage of the project saw an agreement that led to the formation of a library cooperation network called the Jogja Library Network. The network in this pilot project consisted of four university libraries in Jogja, the libraries of Gajah Mada University (UGM), State University of Yogyakarta (UNY), University Islam Indonesia (UII) and Institute of Arts Indonesia (ISI). To facilitate the project, the Provincial Government allocated a sum of five million rupiah and donated a computer and the necessary software to each of the four university libraries. These libraries were tasked to formulate regulations, procedures and interlibrary loan requirements of the JLA, which in turn were supervised by the Provincial Library.

In addition to the JLA programme, there was a continued collaboration with the "Friends of the Library" that supported a range of library activities in Jogja. This partnership was marked by the signing of a Memorandum of Understanding between the Provincial Library and several institutions, namely Bank Tabungan Negara and Bank Pembangunan Daerah (both local Indonesian banks), Lembaga Pendidikan Bahasa Asing lia Yogyakarta (Institute of Foreign Languages), and the publishing houses Kanisius, Erlangga and



Adicita. This alliance focused on the formation of libraries in non-governmental and private and public institutions. This initiative was in tandem with the directive issued by Indonesia's President Susilo Bambang Yudhoyono during the ceremony commemorating the 26th anniversary of the National Library of Indonesia on 17 May 2006.

The JLA will eventually link up with the Indonesian Digital Library Network (IDLN). The IDLN aims to be all-inclusive and its main purpose is to facilitate information access among educational and research institutions in the country, and to coordinate local networks operating in the provinces. Every user will be able to access a number of academic papers online, such as final assignments, dissertations, research reports and scientific articles, etc. The network is also expected to provide information via text, audio-visual means, and various multimedia that can later be developed for distance learning. The contents of the e-library are available online (www.jogjalib.com) or offline through cd-roms.

The array of information and scientific sources that are presently scattered across the Jogja region can be digitally unified into a single database. Meanwhile, library materials in their physical printed forms can be acquired through the interlibrary loan (ILL) facility. The integration of information sources will indirectly bring the library closer to the community. The era when the library passively waited for its users to visit, no matter what inconveniences they faced in travelling to the library, is long gone. In order to bring the

library to the people, the Provincial Library has introduced mobile library services. These mobile facilities, commonly abbreviated MPK, has been expanding since 2004 as part of the National Library of Indonesia's grant to all provincial libraries and selected district and municipal libraries. In addition, in 2006, the National Library developed an electronic mobile library prototype. This facility does not house reading materials like a conventional mobile library, but instead, provides computers, the requisite software and an Internet connection. Launched in 2007, three such vehicles (popularly called pusteling) have been built, and the main objective is to help schools develop their multimedia and Internet curriculum. For the time being these mobile libraries are limited to the Jakarta area, but in time to come the National Library plans to provide more of such vehicles and help expand the activities of libraries in other Indonesian provinces and municipalities.

Presently, the collections of libraries in Jogja are of uneven quality: some are very advanced and hold ample digital information sources, while others only possess rudimentary printed materials. Each library has different automation software and unfortunately not every program is marc-compatible. JLA hopes to bridge these gaps by maximising the use of information sources and disseminating their contents. As a start, steps are being taken to list bibliographic databases of libraries in Jogja in order to create a comprehensive union catalogue. In the future, participating libraries will include not only university libraries but also school libraries,





public libraries and special libraries. These libraries will submit their collection information to be included in the consolidated database. Finally, in order to have access to this database, users who are registered members of the JLA network will use newly developed chip-embedded smartcards capable of storing a multitude of data. The smartcard user will gain easy access to all libraries without having to undergo complicated administrative procedures.

The establishment of the Jogja Library Council in 2005 has further strengthened Jogja's vision of building a national centre for education by 2020. The Council's main task is to guide libraries and help create an international library system that will help bolster Jogja's reputation as a city of education. This is line with the larger e-government initiative spearheaded by the

Governor of Jogja (Sri Sultan Hamengku Buwono X), who has urged all government agencies and private companies to cooperate in a partnership scheme to implement and promote information and communications technology (ICT) across all sectors in the province. Thus, in time to come, Jogja's vision to be a national centre for education will be achieved, and JLA will be one of the key players at the forefront of this new technology.

Presently JLA is moving towards developing the m-Lib (mobile librarianship), which allows the use of mobile devices to access information within the network. In a sense, this mobile access will act as a sort of library, a classroom, a workplace without walls, or even a country without boundaries. In the long term, JLA will expand and encourage information technology education, and aims to achieve its goal

of having "one school, one computer laboratory" at all elementary and secondary levels in the next five years. To help create a library with international standards, qualified and trained personnel are urgently needed, specifically those with a proficiency in library science, English language and information technology. Future librarians will be adept individuals who will come to be seen as subjects of information, instead of becoming objects of information. Through information technology, it is hoped that the quality of teaching and education will improve over time.

### **EPILOGUE**

Yogyakarta is a province-city that wears many hats — it is a city of art, tourism and education, and it is home to people of different ethnic groups, faiths and ancestries, all living harmoniously and forming the city's distinctive cultural character. The catchwords "education city" will become a trademark of Jogja, as hundreds of universities and colleges flourish here. Two of its reputable universities, Gadjah Mada University and University Islam Indonesia, are among the oldest universities in Indonesia. According to the Central Statistics Agency, Jogja is ranked as one of the top five provinces in the Indonesian Human Development Index in terms of life expectancy, education, literacy rate and standard of living. It is therefore only natural that Jogja should be a model for Indonesia's other 33 provinces. It is hoped that cooperation between universities and the government and private sectors through the institution of the library will help produce a skilled and educated labour force that will help advance the overall development of Indonesia.

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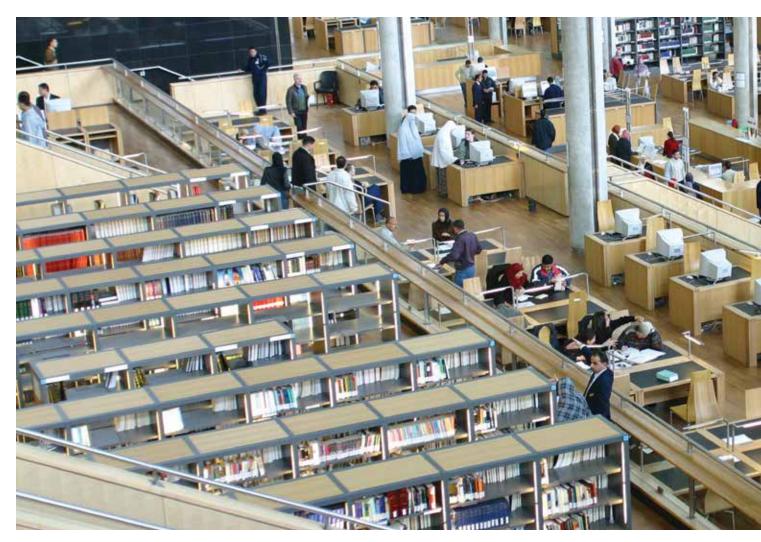
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### Tomorrow's Libraries:

## EMBRACING CHANGE TO CREATE THE



e live in a time of fast, profound and far-reaching change, which will challenge libraries no less than other long-established institutions. Globalisation and the information and communications technology (ICT) revolution we are witnessing are also promoting what I call the "New Knowledge Revolution"; this knowledge revolution can be diagnosed by seven key pillars.

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To face the challenges of the new knowledge economy, libraries must be willing to shift their paradigms, adapt and evolve.

**Dr Ismail Serageldin** is the director of the Library of Alexandria in Egypt and also chairs its affiliated research institutes and museums. He has held many international positions including vice-president of the World Bank (1992–2000). He has received many honours, including the Legion d'Honneur (France) and the Order of the Rising Sun (Japan). He is also the recipient of 33 honorary doctorates.

### THE SEVEN PILLARS OF THE NEW KNOWLEDGE REVOLUTION

Parsing, Life and Organisation. Since the beginning of time, whether we were writing on scrolls or codexes, the accumulation of knowledge was based on parsed structures, with units put next to each other like bricks in a wall of an emerging structure. In addition, each piece was "dead", or fixed, once published. The Internet changed all that. The web page became the unit of parsing, and it is constantly updated. Today, we witness fluid merging of text and image, both still and video as well as 3D virtual reality and augmented reality. The structure, organisation and presentation of knowledge will become one large interconnected, vibrant, global living organism of concepts, ideas and facts that is growing exponentially, and which will require new modes of thinking in order to interact with it.

Image and Text. Throughout history, information has been transmitted mostly as text. The human brain can process visual information with incredible rapidity, but images were difficult to produce and reproduce. Today everybody can record images and we can expect far larger reliance on image—in addition to text—in the future.

Humans and Machines. With the exception of pure mathematics and some aspects of philosophy, it will no longer be possible for any human being to search, find and retrieve, then manipulate knowledge in any field, without the intermediation of machines.

Complexity and Chaos. The world we live in is remarkably complex. Ecosystems, biological functions and the socio-economic transactions of a globalising world are all exceedingly intricate and chaotic. Many of our models, based on the simple mathematics and analogies drawn from physics, are proving inadequate.

Computation and Research. Computing and information science will no longer be only for assisting in crunching large numbers. Today, computational science concepts, tools and theorems are being woven into the very fabric of science and scientific practice.

Convergence and Transformation. Simply put, we once understood chemistry and biology as distinct and separate subjects, but now we have biochemistry. Such moments of convergence, generating new sciences and insights, are extremely productive in the development of our knowledge and technologies.

Pluri-disciplinarity and Policy. The old academic "silos" of disciplines when functioning alone are counterproductive. Many of our real-life problems, such as poverty, gender or the environment, are all multi-dimensional and complex and require a special way of organising all the various disciplinary inputs. We need the wisdom of the humanities in addition to the knowledge of the natural sciences.

### IMPLICATIONS FOR OUR INSTITUTIONS

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The revolution manifested through the seven pillars is changing the very concept and practice of education and of the supporting institutions of culture, namely libraries, archives and museums. Libraries as institutions will continue to be strong supporters of the values we all hold dear: free inquiry, free thought, free speech and

pluralism. But if all materials will be virtual and mobile, what will become of the physical space we now call a library?

First, libraries will continue to harbour the originals. Manuscripts and first editions will continue to work their fascination for us, as the objects—above and beyond the content—are seen to have intrinsic value and worth. Being able to consult these tangible works will confer on the visitor special joys and possible new insights.

Second, there will continue to be certain materials, that for institutional and monetary reasons, will be beyond the reach of most people to access for a nominal fee, and that libraries will be able to provide only in situ.

Third, libraries will be the bridge between the general population, especially researchers, and the national and international archiving system. The sheer scale of that enterprise will pose particular problems, that are likely to be addressed only by libraries and archiving institutions.

But more than that, libraries will be transformed and will continue their essential societal role.

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### TEN ASPECTS OF THE LIBRARIES OF TOMORROW

To prepare for the challenges of tomorrow, libraries today should pursue a number of policies and programmes. Based on our experience in Egypt's Library of Alexandria, I would suggest the following 10 points:

Enormous digital resources. Alliances with others will be necessary and a global system of interlinked libraries will emerge between national systems, each of which will represent a networked system encompassing the national depository library, the specialised research libraries and the general public libraries. Singapore is a good precursor of that national system.

Integrated maps, video and images with text. The new digital resources will include seamless linkages between resources that were previously treated separately: maps, video, images and scanned manuscripts, with text journals, monographs and books as well as music and statistical databases. This will require new systems of classification, storage and retrieval.

User-friendly presentation and accessibility. With so much content already available on the web for free, and successful seductive commercial presentations



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— DR ISMAIL SERAGELDIN

competing for the attention of our youth, the offerings of libraries must be packaged and presented in an accessible and userfriendly fashion.

Collaborating with others to create offerings that cannot be found elsewhere. Between them, libraries have resources that few other institutions can match. Library collaborations can produce properly curated products that no one else can offer. The



World Digital Library (www.WDL.org) offers a glimpse of what the future may hold for libraries.

Working towards machine translation and summarisation services. Language and length will be obstacles to the reader and researcher of the future. Thus libraries must be at the forefront of the supporters and users of machine-based translation and summarisation.

Make the library an attractive place for youth. Most young people do not like old-style libraries with their hushed reading rooms. They prefer going online to search for information and spending their time in common rooms in their dorms. The library must offer them an infrastructure and three kinds of places. The infrastructure should involve constant display of and easy access to the latest knowledge, as well as the vast resources available.

The three kinds of spaces should be: (i) creative messy places where young people can create together, with food, music and flipcharts or their future equivalents; (ii) collaborative spaces where they can study together in relative quiet, but with active discussions; and finally (iii) the quiet cubicle-type of space for single researchers. There should also be spaces for art exhibits and common functions. Since much

of the physical storage of volumes can be off-site, it will liberate building space for other uses. This will ensure that the library remains at the heart of campus life in universities and community life in cities.

New systems of organising knowledge. The emergence of new fields of knowledge and the transformation of old domains will require that we keep an open mind to what will be the best systems of classification and organisation of knowledge.

A full infrastructure for the researcher. The library will provide a one-stop shop for the interested researcher. It will become the lab of those engaged in humanities and social sciences, and a complement to the wet labs of natural scientists. In addition to providing the attractive spaces previously mentioned, libraries will provide the knowledge infrastructure to support the user: vast electronic resources, broadband connectivity, 3D printing, access to computer support and much more.

Provide custom-printed books on demand. Bibliophiles will be able to utilise print-on-demand services and obtain a copy (paying the royalties of authors and publishers) of their desired book, ensuring that no book will ever be out of print again.

Incorporating Change. Whatever we do, and however much we reflect and plan,

reality will present us with more change than we can anticipate. Thus, constant monitoring and the ability to introduce change rapidly will be important.

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### CONCLUSION

Have we even begun to plumb the depths of the challenge and its implications? Probably not. It would be hubris to imagine that we, who could never have imagined the impact of the Internet 20 years ago, would be able to lay down a precise path to the future for the next 20 years. But I predict that libraries will continue to be a fundamental building block of the structure of culture and knowledge in the society of the future.

The magnificent enterprise of socialisation and learning, involving children, schools, youth and their parents will continue as long as societies continue to exist. Libraries are an essential part of that enterprise. The transition from childhood to adulthood involves more than skills transfer, it involves Culture: learning who we are and where we belong. Libraries will therefore be part of our future as much as they have been part of our past. •

## National Library of Australia's The Control of Australia's Achievements and Possibilities

Canberra's National Library of Australia's free online discovery service, Trove is used widely by both Australian residents and the international community, making it not only an Australian resource, but a global one.

This overview of Trove was prepared by Marie-Louise Ayres, Assistant Director-General, Resource Sharing; Debbie Campbell, Director, Collaborative Services; and Anne-Marie Schwirtlich, Director-General of the National Library of Australia in Canberra. With colleagues across the Library they support the National Library's goal to make as much of its collection as possible available online in collaboration with other Australian cultural heritage agencies. Trove is an embodiment of that goal.

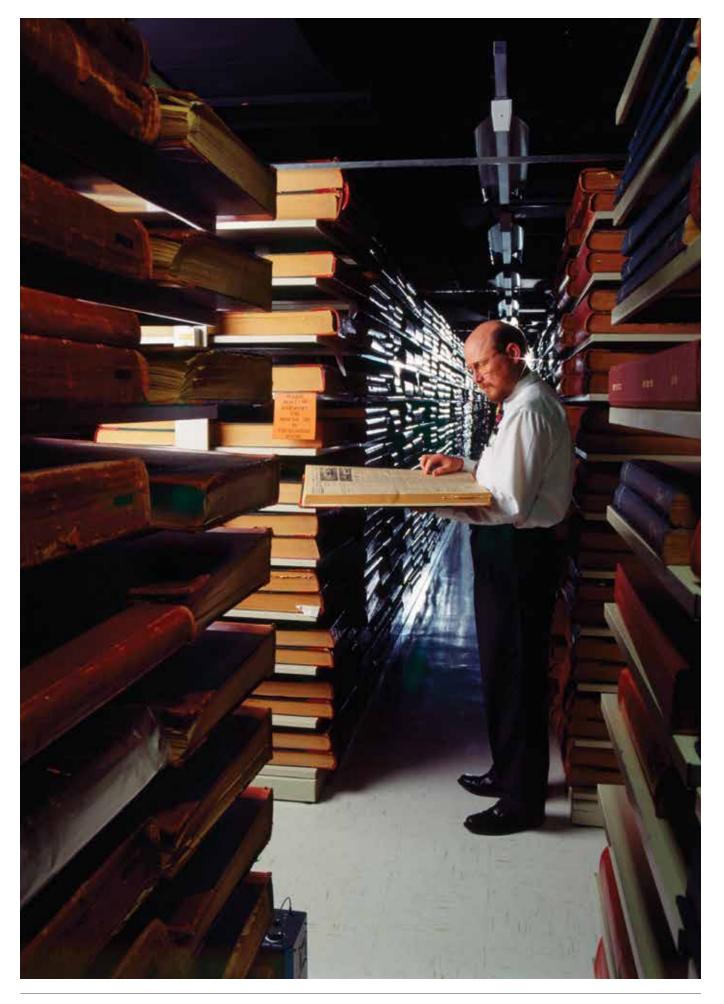
### SINCE ITS LAUNCH IN LATE 2009, TROVE

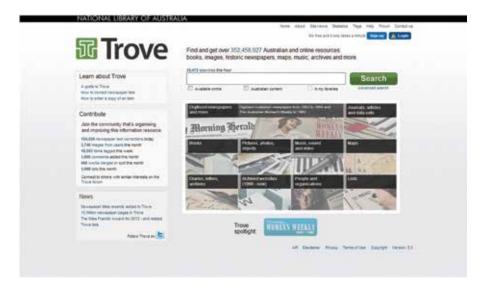
(trove.nla.gov.au) has become the National Library of Australia's (NLA) most popular online service. Every second, three people search Trove, and one corrects a line of computer translated newspaper text; every minute, someone tags an article; and every hour, a comment is added to an item and an image is uploaded by an individual for inclusion.

Trove is a free online discovery service that links people across Australia and anywhere in the world to resources that are available online, or are available in Australian libraries, cultural institutions and research collections. Highlighting valuable material collected by more than 1,100 Australian libraries and more than 100 galleries, museums, archives and historical societies, Trove links to more than 340 million resources in multiple formats.¹

Trove allows any researcher or member of the public to discover and locate books, articles, conference papers, theses and other research resources; find and view pictures that are held by Australian collecting institutions; find and read full-text articles from the collection of digitised Australian newspapers issued between 1803 and 1954; find and explore websites from PANDORA, Australia's web archive; and identify archival papers, letters, diaries and other collections. Trove goes beyond providing access to resources; Trove users can also find and read biographies from multiple sources such as the Australian Dictionary of Biography, the Australian Women's Register and the Encyclopaedia of Australian Science.

Trove use is growing very rapidly. By April 2013, Trove had an average of more than 60,000 unique visitors per day, and a daily high of nearly 80,000 unique visitors—nearly double the use of just a year earlier. Trove users are increasingly accessing Trove content and services via mobile devices, with more than 14 percent





using smart phones and tablets. Trove users spend a much longer time on the Trove website than they do on the NLA's website, catalogue or comparable services. When users arrive at Trove (with more than three-quarters of those arrivals coming directly from finding Trove resources via major search engines), they have plenty of content to explore and attractive ways in which to engage with that content.

Trove is used around the nation, with the use in each Australian state and territory closely matching the size of their populations. Trove has a truly national reach. Australians in regional, rural and remote areas are particularly appreciative of their new access to national documentary heritage, as this comment from a regional resident shows: "Using the e-resources through NLA [Trove] is very useful when you live in a rural area and have to travel miles to access resources." Indigenous elders in remote Western Australian communities are delighted to find images, newspaper articles and other resources about their communities in Trove, and in some cases are using these resources to share their stories with their young people. Australian indigenous culture is the longest continuously surviving culture in the world, and the NLA is proud to make it just that bit easier for indigenous people to connect with their culture and their history.

Trove is also a service used around the world, with more than 40 percent of usage by residents from other countries. While UK and US visitors dominate, Trove does receive visits from many Asian countries. Recent Indonesian visitors to NLA were astonished to find the wealth of Indone-

sian resources available through Trove, the result of the NLA's very strong Asian collections, and Trove's work in acquiring digital resources from major research aggregators. The NLA sees Trove as a vital way of making Australian culture more visible to Asia, supporting the Australian Government's aims to improve cultural understanding between Australia and the Asian region.

Trove's content base is also growing rapidly. In May 2010, Trove provided access to 100 million items. In May 2011, the number of information resources in Trove almost doubled, to more than 200 million items, when access was provided to many millions of journal articles contained in electronic databases to which Australian libraries subscribe. Built with the support of Australian State and Territory libraries and with the cooperation of the vendors Gale and Informit, any visitor to Trove can find an article in one of these databases, view a list of Australian libraries subscribing to the database and, if the visitor is a member of one of these libraries, access and read the article immediately online.

This development was driven by the view that more use could be made of these electronic collections, particularly by the users of State, Territory and public libraries. A review in August 2012 found that the use of the service is healthy and that it achieves the aim of making it easier for Australians to find licenced articles they are entitled to use. Use of the service has doubled in the last financial year, while the content grows with regular refreshes of data from the vendors. The NLA was surprised to find that the highest users of the service were patrons of Australian uni-

versity libraries, and that take-up by patrons of State, Territory and public libraries was low and likely to continue that way. The review also found that acquiring, indexing and delivering the content is very resource-intensive, and that expanding the service was beyond the NLA's means. The NLA will not be expanding the service beyond the current vendors and databases, and will prioritise Australian content for the service.

Transcripts of selected Australian Broadcasting Corporation (ABC) Radio National programmes were added to Trove in mid-2012, where they could be viewed in the context of many relevant resources such as books, articles and photographs. Transcripts from 4Corners (a current affairs television programme), The Science Show and The Philosopher's Zone are accessible, and the Library is in discussion with the ABC about adding transcripts from other Radio National shows, including The Health Report, The Law Report, Encounter, All in the Mind and Background Briefing (a current affairs radio programme).

Trove content was also augmented in 2012 following the digitisation of five non-English language Australian newspapers - the Italian Il Giornale Italiano (1932-1940), the German newspapers, Suedaustralische Zeitung/Südaustralische Zeitung (1850-1851), Süd-Australische Zeitung (1860-1874) and the Adelaider Deutsche Zeitung (1851 and 1860-1862), and the Estonian Meie Kodu (1949-1954). These newspapers are the first non-English language newspapers to be delivered through Trove and were a pilot project to identify the issues associated with digitising non-English language newspapers. Following the recent release of these first non-English language newspapers, the Special Broadcasting Service (SBS) produced a brief podcast about the project.4

Over the last year, newspapers from New South Wales, Queensland, South Australia and Western Australia have all been digitised and delivered through Trove. They include titles such as the Gawler Bunyip, the Western Star and Roma Advertiser, the Kalgoorlie Miner and the Launceston Courier. The state of Victoria has focused its efforts on digitising issues printed during World War I (1914–1918) from a large number of newspaper titles, including the Bendigonian, the Gippsland Mercury, the Port Fairy Gazette and the Snowy River Mail. These are all regional titles, from communities in which every



town of any size has a war memorial honouring the young men who fought and died during that conflict.

The State Library of New South Wales will fund the digitisation of more than four million new pages of rural and regional newspapers - many of which were last published years ago — over the next three years as part of its Digital Excellence strategy. The titles of the newspapers to be digitised give a tantalising glimpse into the diversity of Australian newspapers and the audiences they served. They include The Cumberland Argus and Fruitgrowers Advocate, The Hebrew Standard of Australasia, The International Socialist, the Irrigation Record, the Miners Advocate and Northumberland Recorder among many others. While the State Library's project is a very large one, smaller local groups — including the Wagga Wagga District Historical Society and the Gilgandra Shire Council - have also raised sufficient funds to digitise, process and deliver their local historical newspapers through Trove. The NLA itself is raising funds to digitise post-1954 issues of The Canberra Times after gaining the permission of the publisher to digitise beyond the 1954 copyright date.

### A COMMUNITY EFFORT

Trove newspapers are extremely popular with the Australian public, with more

than three-quarters of all Trove searches beginning in the newspapers zone. But newspaper users do not just read or use this content — they actively contribute to improving its quality. Optical character recognition is never 100 percent accurate on scans of old and sometimes not particularly legible microfilmed newspapers. Recognising this, the NLA opened up the newspaper transcripts to correction by any member of the public. The enthusiasm with which members of the public have taken up text correction of Australian newspapers is remarkable, with 94 million lines of text corrected since mid-2008. The NLA has celebrated this national volunteer effort but has only recently estimated its financial value. The NLA calculates that the 250 work years of assistance equates to AUD\$15.5 million in value. This is a huge community contribution to a public good—one the NLA could not have achieved without "opening the archive" to the correctors.

Trove users do not only contribute by correcting text. They have contributed more than 170,000 images of Australian life to the "Trove: Australia in Pictures" Flickr pool, which is then harvested into Trove so that this community-created content is viewed alongside the resources of collecting institutions. Trove users have added more than two million tags and more than 55,000 comments to Trove resources. They have created more than

35,000 lists on topics as varied as the visits of the Ballets Russes dance company to Australia and 1930s debates around the importation of margarine to Australia.

While many of these volunteers are individual correctors, taggers and listers working alone in their homes or offices on topics and at times that suit them, Trove users are increasingly self-organising. They communicate with each other via the Trove Forum, providing tips and tricks, responding to requests for help, and commiserating with each other on the rare occasions when Trove goes offline. A recent outage prompted a regular user to post this note of relief: "Trove, the love of my life, where were you yesterday? I arrived at your house and found a small note on the door saying 'temporary technical problem'. Please, Trove, do not go out, wait for me faithfully, be my best friend forever."

This excerpt from an email is representative of the community pride and engagement in Trove and volunteer hours invested in correcting text: "We began a Treasure Trover group late last year at the Rockhampton Regional Council Library. Now that our local Rockhampton newspapers are on the Trove website we meet weekly... Our big sky intention is to be the first newspaper on the Trove site that's as near 100 percent corrected as possible... I've been surprised how invested and how much ownership the group has taken of

our paper — we are meeting even in the middle of the flood crisis!"

Amy Lehmann is the organiser of Trove Tuesdays, a group that commits to blogging about content they discover in Trove every Tuesday.<sup>6</sup> Every week, the group shares its latest finds, highlighting the different ways Trove can be used by family and local historians.

At a more formal level, academic groups are also organising groups to tag content relevant to specific research projects. For example, the large-scale South Eastern Australian Recent Climate History (SEARCH)<sup>7</sup> project gathered a pool of volunteers to find and tag (using specific tags) newspaper articles around particular climate events. This content could then be further analysed and processed by scientists comparing documentary records with early instrumental weather data and paleoclimate records (e.g. ice cores and tree rings).

Each of these ways of engaging with Trove relies on trust. The NLA opened its very open approach has had significant benefits for the NLA. One of the most common comments the NLA hears from those engaging with Trove content is how simple and easy it is to do so.

The NLA has had a minimal advertising budget for Trove, so the success of Trove's user engagement really does seem to rely on the goodwill of the Australian public, their sense of a shared and worthy purpose, the ease with which they can engage, and of course, word of mouth or its Twitterverse equivalent. The NLA is very aware that Trove users trust us—to keep Australia's history safe, to keep their individual stories safe, and to manage their corrections, tags, comments and lists for the long-term. It is mutual trust that has made Trove user engagement the success that it is today.

This very sound foundation offers the potential for community engagement to be taken in new directions and to new levels. What they will be, only the future will tell! We do know that the release of the Trove

open government data. We look forward to the results of many creative people "playing" with the huge Trove dataset and coming up with something new.

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### A NEW WAY TO RESEARCH

While Trove is certainly a locus for researcher activity in the digital humanities arena, it has revolutionised historical research in Australia. The Australian library community's focus on digitising newspapers reflects their significance as a major resource of national and international importance, documenting events, people, places and trends that may not be found elsewhere, with enormous value to research and learning.

Digitised newspapers have:

- provided unprecedented access to a selection of newspaper titles from across the country;
- supported researchers in fields as diverse as historical studies, immunology, design, linguistics, climate change, theatre studies and ecology;
- made an appreciable difference to the efficiency with which researchers operate — there is one place to go and to search across digitised newspapers, and you can search and get results instantaneously, thereby saving months of research time and travel costs. Researchers can focus on analysis, synthesis and dissemination rather than on information gathering;
- established a very successful mechanism, which has been extended through Trove, for NLA's users to interact with collections and share information with each other; and
- enabled new lines of enquiry by providing a mass of content that can be interrogated in different and more sophisticated ways.

This digital resource — along with the many contextual books, images, conference papers, articles, maps, archives, sound recordings and more — supports a diversity of community and elite research and is much complimented, for example: "... as an ecological researcher who had to fly to Perth and spend weeks in front of a newspaper microfilm reader for his PhD research, may I pass on my sincere thanks to you and your digitisation team for the



archives based on trust. Trove users correcting text, adding tags or comments, or organising resource lists do not have to present credentials, provide any kind of bona fide proof of their knowledge, or jump through other bureaucratic "hoops". They do need to sign a lightweight Terms of Use to interact with the service, but can choose whether to do their work anonymously or as a registered user. The Trove team does not routinely check any volunteer work, and only rarely has to respond to inappropriate comments or corrections, in most cases notified by another Trove user. This

API<sup>s</sup> — which makes Trove content freely available for reuse in other services — is already spawning creative reuse by researchers developing alternative "generous" interfaces to large datasets, software developers working on software that extracts semantic meaning from large text corpora, and those wanting to include Trove resources in their own information spaces. This year, the National and State Libraries Australasia (NSLA) is sponsoring a prize for GovHack 2013,<sup>9</sup> a major event where developers have a short time to develop new and innovative ways of using

newspaper digitisation... The information we have found will significantly challenge and change our understanding of these species and their historical declines. I hope through our efforts we will be better able to manage and conserve these critical species. Thank you!"

Creative endeavour of many kinds is also supported by Trove. When Felix Williamson, who plays cocaine and two-up king Phil Jeffs in the series *Underbelly*, was preparing for the role, he noted that he "read every newspaper article he could find on Jeffs in the National Library of Australia's online research service, Trove"."

Trove has also won recognition from peers. It won the 2011 Excellence in eGovernment award, and in 2012 won the Australian and New Zealand Internet Award for Innovation.11 The judges of this competition commented that Trove "provides a fun, slick, dynamic discovery experience for the user. The initiative is a terrific resource for professional and amateur social researchers... It is unique as it allows users interactive ownership of the resources as it is the only site that allows the general public access to correct the electronically translated text of the digitised newspapers as well as add comments, tags, lists and merge and split works."

#### WHAT'S IN STORE?

The NLA recognises that in the fast-paced digital world such recognition can never be taken for granted. Providing a reliable and high performance service is a must; building new services and enriching Trove's content are essential if we are to meet new expectations of our existing Trove user base, and if we are to diversify our user demographic. These are not small challenges.

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Over the next few years we will build Trove's content by adding more digitised newspapers, working with more cultural organisations to make their rare and unique Australian collections more discoverable, and adding digitised books and journals as the NLA takes its first steps in the mass digitisation of these documentary sources. We will develop our content building toolkit to make it easier to include Australian digital content from other services such as Europeana and Digital New Zealand. We aim to enrich content about Australian people by leveraging on the Virtual International Au-

thority File, and by working with other biographical resources.

In 2013, we are redeveloping the Trove newspapers zone, to accommodate the rapid increase in content, improve performance, and deliver a mobile-friendly interface to this most popular of Trove zones. We will also deliver a Performing Arts "selective subject" view in Trove this year, and will be interested to see whether this approach to resource discovery will be sufficiently valuable to our users to justify investment in other subject-based views. We aim to improve a number of our services, e.g. Trove lists, over the next few years, and are always considering new possibilities for service. Our capacity to roll out service improvement is, of course, constrained by our resources, and by the realities of supporting the existing service - and its growing content base — so that it remains as easy and quick to use as it is now. Trove requires many servers, drivers, pieces of software, bandwidth and a talented team of IT professionals to meet all these needs. The Trove teams - both technical and customer focused — are small but highly dedicated to their mission, and deliver huge value on a relatively modest resource base.

The NLA has engaged a market research company to evaluate Trove customer satisfaction. The results should reveal more about the Trove demographic: why users use Trove; help us to understand Trove usage patterns and where Trove sits in the research process; gain an understanding of the value users place on the service; what they like and dislike and how they would like to see Trove develop in the future. The research phase will be completed by July 2013, with evaluation of the results expected to take several months longer.

This will be the first time the NLA will have an overall view of the Trove user base. We know how many users we have; how often they return; which zones they prefer to use; the length of each visit; what they do on the Trove site; and where they come from in terms of countries and Australian states and territories. Recent research by the NLA's Paul Hagon yielded interesting results on patterns of text correction,12 while research by University of Canberra's Sultana Lubna Alam and John Campbell focused on the motivations of those engaging in Trove text correction.13 With every new piece of research -whether conducted by NLA staff, commissioned by the NLA, or initiated independently — on Trove as a social phenomenon rather than as content source, we understand a little more about our huge user base. One measure of our success is, as Annie Talvé noted in a recent paper, 14 that "to Trove" is now being used as a verb!

Developing Trove has been a five-year adventure for the NLA. It is now a mature service — with all the expectations that it brings — which is deeply embedded in Australia's research infrastructure, and serves an astonishing variety of researchers and fields of enquiry. The NLA is committed to Trove as the primary mechanism for discovery of Australian documentary heritage, and looks forward to continuing "to Trove" for many years to come. •

#### **ENDNOTES**

- Further information about trove's aims and content are available at <a href="http://trove.Nla.Gov.Au/general/more-about-trove/">http://trove.Nla.Gov.Au/general/more-about-trove/</a>
- Viva news, 216 maret 2013, <a href="http://us.Dunia.">http://us.Dunia.</a>
   News.Viva.Co.Id/news/read/397898-begini-cara-australia-koleksi-referensi-tentang-in
- The Australian government released an important white paper, Australia in the Asian century, in 2012. The white paper and information on associated program activities is available at: <a href="http://asiancentury.Dpmc.Gov.Au/">http://asiancentury.Dpmc.Gov.Au/</a>
- 4. The podcast is available at: <a href="http://www.Sbs.Com\_Au/podcasts/naca/radionews/episode/220565/national-library-digitises-non-english-newspapers">http://www.Sbs.Com\_Au/podcasts/naca/radionews/episode/220565/national-library-digitises-non-english-newspapers</a>
- More information on the state library of new south wales' program is available at: http://www.Sl.Nsw. Gov.Au/about/projects/digital\_excellence/index. html
- 5. The group communicates via twitter: <a href="https://twitter.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/search?Q=%23trovetuesday&src=hash.com/se
- A compendium of participating bloggers is available at: <a href="http://branchesleavespollen.Blogspot.Com.">http://branchesleavespollen.Blogspot.Com.</a>
   Au/p/trove-tuesday.Html
- Further information on this project, led by the university of melbourne is available at: <a href="http://climatehistory.com.Au/">http://climatehistory.com.Au/</a>
- Information on the api, how to access it, and terms of use are available at: <a href="http://trove.Nla.Gov.Au/general/api">http://trove.Nla.Gov.Au/general/api</a>
- Information about this event, and links to products developed by past winners is available at: <a href="http://www.Govhack.Org/">http://www.Govhack.Org/</a>
- Underbelly (http://en.Wikipedia.Org/wiki/ underbelly\_%28tv\_series%29) was an australian television phenomenon, winning both popular and critical acclaim. Williamson was quoted in the west australian on 11 september 2011.
- 12. The full citation is available at: <a href="http://www.lnternetawards.Org.Au/index.Php/winners">http://www.lnternetawards.Org.Au/index.Php/winners</a>
- Paul hagon's slides are available at: <a href="http://www.Information-online.Com.Au/pdf/tuesday\_concurrent\_2\_1125\_hagon.Pdf">http://www.Information-online.Com.Au/pdf/tuesday\_concurrent\_2\_1125\_hagon.Pdf</a>
- Their recent conference paper, 'crowdsourcing motivations in a not-for-profit glam context: the australian newspapers digitisation program' is available at: <a href="http://dro.Deakin.Edu.Au/eserv/du:30049107/alam-crowdsourcingmotivations-2012.Pdf">http://dro.Deakin.Edu.Au/eserv/du:30049107/alam-crowdsourcingmotivations-2012.Pdf</a> (and discoverable via trove at http://trove.Nla.Gov.Au/version/188319518).
- Presented at the 'inspired by trove' seminar at the national library of australia on 28 february 2013. http://www.Projectsisu.Com/2013/03/do-youtrove/.

The Library Society of China has been encouraging academic exchange, organising seminars and training courses for librarians throughout China in their push for better library services.

# IMPROVING THE SERVICES OF THE LIBRARY SOCIETY OF CHINA

Overview of the Work of the LSC in 2012

#### THE LIBRARY SOCIETY OF CHINA (LSC) IS THE

largest academic civil society group in the Chinese library community. It falls under the guidance of the China Association for Science and Technology (CAST) in service operation and is subordinate to the China National Library in administration. It is registered with the China Ministry of Civil Affairs and won a 4A qualification evaluation rating in 2012. In recent years, led by its Council and through the promotion of academic exchange and library services, the LSC has made considerable progress in enhancing its servicing capabilities.

#### PROMOTION OF ACADEMIC EXCHANGE

The LSC held 28 academic activities of varying themes in 2012 with 10,687 participants. One such example is the Library Society of China Annual Conference 2012. The "China Library Annual Conference 2012—the Library Society of China Annual Conference · China Library Exhibition" was successfully held in Dongguan City, Guangdong Province with the theme "Toward a strong cultural nation—the

responsibilities and mission of libraries". This annual conference collected 1,617 papers - 35 percent more than the year before. It was also the first year the conference held four themed forums. A total of 27 parallel sessions were held in an effort to subdivide research and exchange directions and as a result of a proactive planning and bidding process. The LSC was, for the first time, specifically entrusted with the function to issue and release information related to the library sector and relevant businesses. Some 1,691 delegates attended the academic conference and 6,544 took part in the themed forums, parallel sessions and information release meetings.

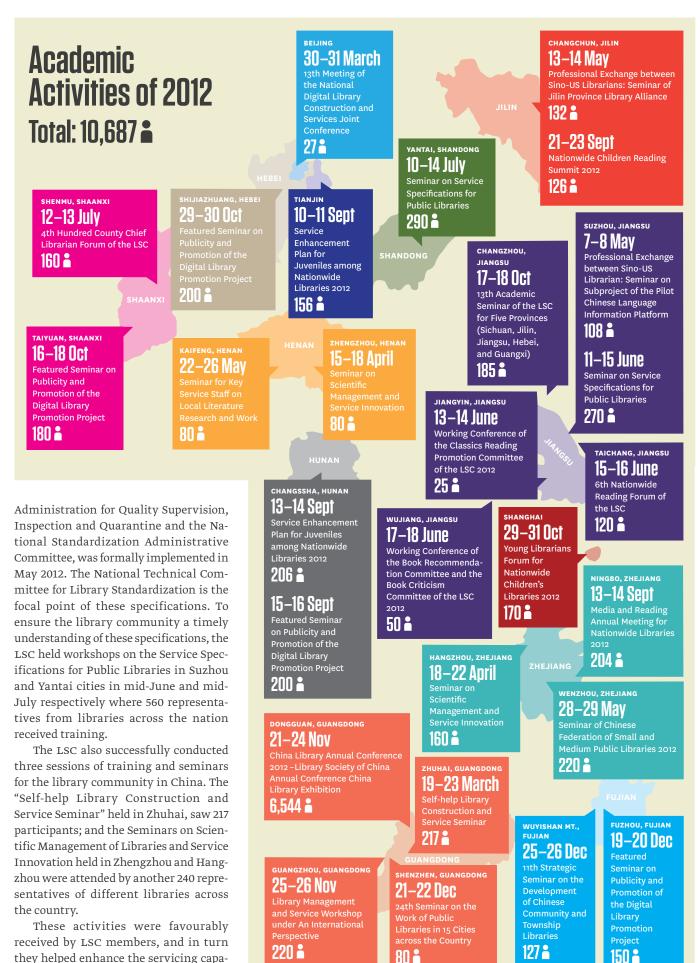
To provide guidance for the development of grassroot libraries, the 4th Hundred-County Chief Librarian Forum of the LSC was held from July 12 to 13 in Shenmu County Library of Shaanxi Province. With the theme of "Construction and service innovation of county libraries in a free public service setting", over 150 chief librarians from grassroot public libraries nationwide took part in the forum and shared case studies and experiences of free public service innovation from their respective jurisdictions. After discussion and putting matters to a vote, a consensus, called the Shenmu Consensus, of the 4th LSC Hundred-County Chief Librarian Forum was made.

### CONDUCTING SECTORIAL COORDINATION AND SERVICES

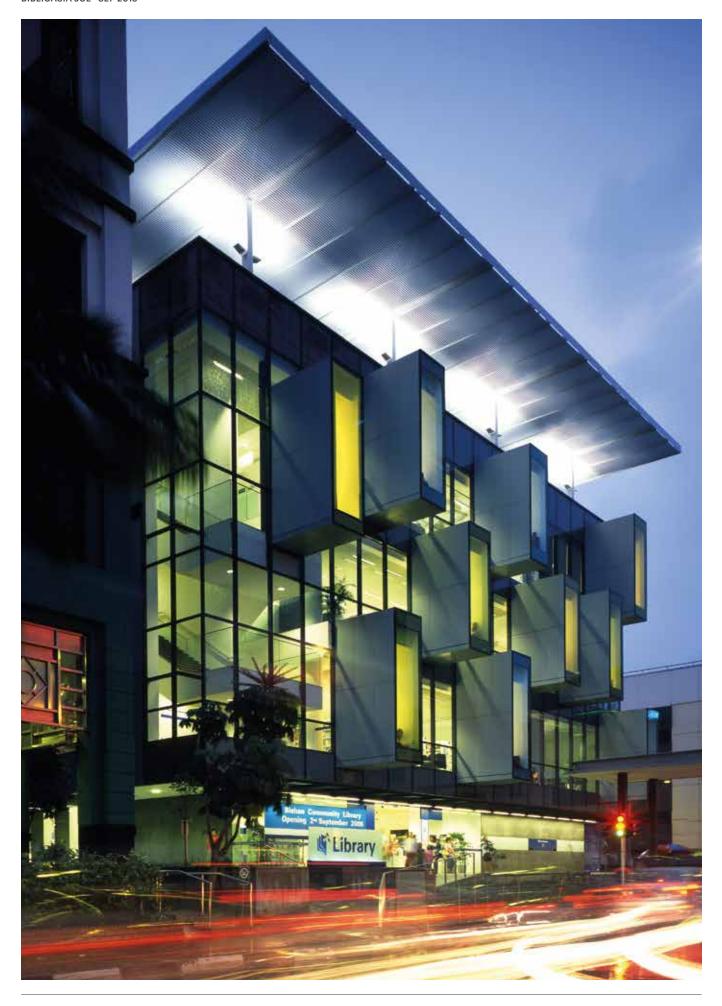
The LSC mobilised the library community to conduct research and decision consultation over relevant laws and regulations. Part of the fruit of this work are the "Opinions over Law of the People's Republic of China on Public Libraries" that was submitted to the Law Office of the State Council for approval and the "Opinions over the Copyright Law of the People's Republic of China" that was submitted to the Ministry of Culture.

The service specifications for Public Libraries, approved for release by the State

Yan Xiangdong is the secretary general of the Library Society of China. He is also an IFLA A&O Committee Member and IFLA MLAS Committee Member and the former director of the International Cooperation Division of the National Library of China. Ma Jun is the chief of Administration Office of the Library Society of China.



bilities of the Society itself.



From programmes and initiatives targeted at children, to courses and senior-friendly print material for the elderly, and even mobile bus services for those with special needs, the public libraries of Singapore have been tirelessly serving and engaging the residents of the nation.

# Singapore Public Libraries Past, Present and Future

he public libraries in Singapore can trace their roots to 1823 when the foundation stone of the library of Singapore's first English school, the Raffles Institution, was laid. This library later became part of the Raffles Museum, and eventually moved into premises on Stamford Road in 1960 after becoming the National Library. Singapore's public libraries thus began as part of the National Library group of libraries and each branch was seen as an extension of the National Library in Stamford Road.

The National Library Board (NLB) was formed on 1 September 1995, and today oversees the National Library, Public Libraries and the National Archives.

The public libraries have come a long way from being mere satellite branches of the National Library. The current range of services and infrastructure within the public libraries have been developed to support the Libraries for Life masterplan that aims to see the libraries into 2020.

#### **BUILDING LIBRARIES FOR LIFE**

Under the Library 2000 plan, which was conceptualised in 1996 by the Library Review Committee, an extensive and ambitious building programme was implemented to make libraries and information more accessible with the goal to expand the learning capacity of the nation. From

just seven public libraries, the public library system grew at an incredible rate into a three-tier structure consisting of three regional libraries, 10 mid-size libraries and 12 small libraries.

Today, the mid-size and small public libraries provide information and library materials as well as programmes to meet the needs of the people living in the surrounding areas every day of the week. Accessibility for the residents is key.

The regional libraries on the other hand, with extensive collections that include reference materials and services, cater to a wider catchment area and more specialised information needs.

Located in Chinatown, the most recent public library opened on 31 January 2013 as a themed library specialising in Chinese Arts and Culture, with its own unique and carefully curated collection. This is the first public library to be privately funded and staffed by volunteers. The next library expected to open its doors in 2014 is library @ orchard, which is located in the heart of Singapore's shopping district, Orchard Road. This is our first public library planned and conceptualised through the use of design thinking.

The libraries in Singapore have always been considering how to redefine and design their spaces. An example is the creation of a dedicated space in 2004 for the Teens Library Service at the Jurong Regional Library called "Verging All Teens"

Francisca Cardoza is the senior manager of the Library Development and Corporate Services Division under the Public Libraries Singapore. She has experience in collection development and bibliographic services as well as early outsourcing efforts in the National Library Board (NLB). Her current portfolio comprises the development and corporate support of public library staff.





(V.A.T.). This space and the services offered were planned, designed and managed by teen volunteers.

Another example is the the Bamboo Garden at the Central Public Library. It was designed to maximise the use of library spaces, allowing visitors access to the sculptures in the garden as well as NLB's heritage—5,000 bricks from the former National Library at Stamford Road's facade are located there.

Much excitement surrounds "My Tree House", which is the world's first green library for children housed at the Central Public Library. This environmental library features a green collection, green programmes and a green design.

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#### READERS FOR LIFE

The goal of promoting a love for reading among Singaporeans has always been a

part of the Public Library's culture and mission. This goal is now one of NLB's key initiatives of Reading, Learning and Info-Literacy. Under this umbrella, programmes tailored to specific needs of the different customer groups are in place and being developed to support early literacy and youth and senior services. To achieve this and other goals, collaboration with partners and with community volunteers has become a pillar for the accomplishments of the public libraries.

Current and planned efforts to encourage reading in children differs from our past efforts in that current strategies utilise a more integrated approach to equip educators and support parents in the development of early literacy. Thematic activity toolkits allow educators to use storybooks and audiovisuals to ignite interest in reading. There are advocacy packages for parents to engage children



through fun activities that include talking, singing, playing, reading and writing. Low-income parents, in particular, can receive ready resources to use with their children.

In addition, the public libraries are in the process of setting up an early literacy library (at the Jurong Regional Library) for children below six and their parents. This will be a space where parents can learn about early literacy practices that will help the development of pre-reading skills in their children. To this end, the public libraries are partnering like-minded organisations to provide programmes as well as resources and services.

Engaging the youth or teenagers has been challenging for our libraries. In partnership with the Ministry of Education, the Whole School Reading Programme was piloted at 14 schools from 2010 to 2011. A full range of reading packages and activities has been developed and this will be



rolled out to 330 schools over the next five years to strengthen and raise literacy and reading skills.

Singapore's ageing population has highlighted the need to provide for this segment of our society. Going beyond providing collections with large printed fonts, the libraries are now exploring and providing more senior-friendly content and formats such as audio and e-books. The accessibility of libraries is also critical, and a team of librarians have been dedicated to bring library services out of the libraries to spaces where seniors congregate, such as wellness centres, hospitals and homes.

To this end, the Silver Infocomm Junction was set up at the Woodlands Regional Library in November 2012. This was a collaboration with the Infocomm Development Authority of Singapore with the hope of creating a learning space dedicated to seniors where they can pick up IT skills such as web surfing, social networking and photo or video editing. Silver Infocomm hotspots have been set up for seniors to encourage greater use of multimedia stations and Internet services.

#### **CREATIVE READING PROGRAMMES**

Read.Write.Tell is a national reading and storytelling movement under the Arts & Culture Strategic Review (ACSR) and this encompasses reading clubs in schools, the community and organisations as well as writing communities and programmes. The goal is to cultivate a love for reading and provide opportunities to write and tell stories about Singapore. Older reading clubs focused on reading and sharing, thus this new movement makes writing a deliverable for the 25 Read.Write.Tell communities.

NLB launched its first ever nation-wide reading initiative, READ! Singapore, in 2005. This initiative, adapted from highly successful reading programmes around the world, encourages communal reading, followed by facilitated discussions on the selected stories. READ! Singapore's target audience was initially Singapore residents aged above 15 years old. In 2012 it expanded to include younger audiences aged 7 to 14 and introduced an enhanced MobileRead, a free application that allows access to selected content and enables reading while on the move.

kidsREAD is a national project that, together with the People's Association and community self-help groups, promotes the



love of reading and good reading habits to children from low-income families, aged 4 to 8. Volunteers aged 15 and above form the backbone of kidsREAD. They read to children in Reading Clubs that are located at centres, kindergartens, homes and welfare organisations, as well as primary schools. In 2012, it was proposed that children would remain in the kidsREAD programme until they completed Primary 2, instead of graduating them after a year in the programme.

#### **CREATING NEXT GENERATION LIBRARIES**

Growing Readers for Life also requires creating next generation libraries. This goal involves strengthening the role of libraries as well-loved spaces, and providing equal access to knowledge for everyone. It also includes having libraries serve as social touchpoints for community engagement.

#### Thematic Libraries

Building on the already large network of public libraries, and in order to develop the next generation of libraries, thematic libraries are being set up in existing library spaces. The goal is to cater to more diverse interests of the reading public and encourage further levelling up of reading and learning in special subject areas.

For example, the Jurong Regional Library has been selected to be an environmentally themed library and it will develop special collections, programmes, exhibitions, facilities and services on the subjects of green initiatives, sustainability, recycling and conservation to a depth and

range beyond that of the other public libraries in Singapore.

The Asian Children's Literature Collection was launched at Woodlands Regional Library in April 2012 and its 23,000 volumes include a selection of 800 books in handwritten, out of print and fairytale classics in various Asian languages. This collection has been recognised by UNESCO under its list of Nationally and Internationally Significant Collections.

Other themes include financial literacy at the Tampines Regional Library where the SGX Investment Knowledge Gateway has been housed since April 2013. This learning facility was born out of working with partners to offer interactive financial tools that would provide information on personal financial planning, together with a collection of business and finance books, and free financial literacy programmes.

#### Mobile Libraries

A mobile library service was launched in 1960 with two mobile libraries known collectively as the Library Extension. This increased to 12 mobile library service points and the unit served about 20 percent of public library members as there were insufficient branch libraries to serve the ever growing population. Eventually, after the first eight public library branches were set up, the mobile library services were reduced and then terminated in 1991.

In 2008, Molly (a mobile library in a custom-designed bus) was introduced, providing wireless mobile library services and targeted specifically at the underserved. Molly-Reloaded was launched in 2012 to



further extend the reach of the libraries and to serve a wider community. New features of the updated Molly include eight iPads for access to eResources, an internal bookdrop and upgraded borrowing stations for visitors to borrow items from the 3,000-item strong collection. Molly visits usually include storytelling, puppetry and other activities. Plans for the future include a mini Mobile Library to go where Molly is unable to go, as some schools and venues are unable to accommodate a full-sized bus. Special education schools are one of Molly's key targets, but visits are also made to orphanages, schools and homes.

Public Libraries as Social Touchpoints
All public libraries are being positioned as social touchpoints for the community to interact with or have the opportunity to collaborate on arts and culture, either in terms of creation or appreciation.

To provide Singaporeans with regular opportunities to learn about different art forms, a series of Arts & Culture 101 sessions comprising performances, workshops and talks related to the various forms of art are held. These sessions leverage on the libraries as touchpoints and are curated and facilitated by newly trained Cultural Concierges (librarians who answer queries pertaining to arts and culture).



Digital Library Initiatives and New Media
Public libraries everywhere are being challenged to engage the digital generation within their preferred spaces and adapt to new technologies. The public libraries have a vibrant presence in social media.

One of the earliest efforts was a blog to commemorate the relocation of library@ orchard in 2007. There is also a library blog featuring music, dance, theatre and film that has been curated by library@esplanade, the performing arts library.

Blogs such as High Browse Online recommends good reads and provides updates on books and reading. Read & Reap is a blog with excerpts from literary texts to inspire readers to move beyond reading to provoke questions and conversation. This blog complements the posters and toolkits that have been made available to parents and educators. The ASK blog (Actively Seeking Knowledge with Public Libraries Singapore) showcases interesting queries received via the ASK! Service (an Advisory & Enquiry Service) at the public libraries.

All the individual libraries have their own Facebook accounts, and there is also a Public Library SG Twitter account and a Public Library SG Instagram account, all launched in 2012.

... collaboration
with partners and
with the public and
community as volunteers
has become a pillar for
the accomplishments of
the public libraries.

READ! Singapore has its own website and Facebook page to highlight the nation-wide reading initiative. Volunteers have their own Friends of the Library portal through where they can pick and choose their volunteer opportunities, and they, too, have a Facebook page.

The public libraries also made available from 2012 a free loan service for iPads, Kindles and Tumble Books Playaways at the Bedok Public Library and iPads at the Bukit Merah Public Library to enrich readers' reading experiences and expose them to a range of new reading platforms.

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#### "THE ONLY THING THAT IS CONSTANT IS CHANGE." — HERACLITUS

Library spaces will change even more in the future due to changes in the way people access and share information. This inescapable fact has led to the next phase of development in public libraries that is being conceptualised in a new plan, the Library 2025 Plan. The need for this is based on factors such the completion of the implementation of the Library 2000 plan in 2014, changing user needs and technological changes, as well as a projected increase in Singapore's population by 2025.

Mobile devices and the Internet have impacted the way people access information. Instant gratification and needing information on the go is now a norm. The way in which people consume information has also changed. People sample, repurpose and remix information to create their own take on it. The result is a new product incorporating repurposed content that is shared with a wider community through social media and other channels. Given the rapid change in technology, libraries today struggle with helping their users develop skills to handle information and digital literacy.

The Library 2025 Plan has two main strategies. The first is to create libraries that meet community needs through all seasons of life. This strategy will address the expansion of the physical network of public libraries, and make sure that the libraries are situated at accessible sites so that their resources, services and programmes are available to all Singaporeans.

The second strategy is to re-make libraries to inspire in new ways. This is the part of the plan in which library spaces and services will be revamped to address new literacies and changing behaviour in terms of learning. The vision for this future remaking contains collaboration with part-



ners as well as expanding the co-location of libraries. The goal is to optimise resources and achieve synergies and efficiencies in delivery of services.

The future library space will be one that incorporates reading, building and creation as integral parts of the learning process, where collaboration and peer-topeer sharing are encouraged. The library aims to bring together people of diverse interests and backgrounds to build vibrant and creative communities. At the same time, inspiration, reflection and contemplation are equally important in the creative process. Just as there is a need to accommodate different forms of learning, and different groups of users, so should library spaces be malleable, reflecting a balance between quiet, intimate spaces on the one hand, and vibrant, creative, casual and social spaces on the other.3

Looking towards the future and the implementation of the new plan is both exciting and challenging for the public libraries; change is constant and we look forward to the various programmes that will be carried out with enthusiasm. •

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# THE WAY WE WERE Evolution of the Singapore Family





In conjunction with the launch of the exhibition "Roots: Tracing Family History", held from 25 July 2013 to 16 February 2014, Kartini ruminates on the question of families in Singapore.



#### AT A LOCAL UNIVERSITY, A SOCIOLOGY

lecturer receives the following responses from her students to her question on what a typical Singapore family would look like: a nuclear family, with two children, plus a cat or a dog. Do these "educated perceptions" reflect the public imagination of the Singapore family? Or, can families be imagined or constructed in other ways? By demystifying family and the "traditional family", we see that most idealistic notions of family are far from what we might imagine. More significantly, an overemphasis on personal responsibility for strengthening family values encourages a way of thinking that leads to moralising rather than mobilising concrete reforms.1 Hence, examining families in the past allows us to see the relationship of families to public policies on families.

In this article, we explore how changing family structures in Singapore are a means of understanding Singapore's history, identity formation as well as changing identities. There is no fixed definition of family as the concept is a social construct that varies across time and space. Yet, it is the most basic form of human organisation. Anthropologists have argued that all human societies are organised into some type of family. The universality of family is predicated upon certain characteristics that families are founded upon.

One basic human social experience is marriage. All known human societies have marriages as a legal, social and economic contract between a man and a woman or, until recently, two people of the same sex. Families are formed as a result of marriages. This union legitimises children born or brought into (through adop-

tion) this union. Thus, we state the universality of family because marriage creates family. Family creates kin through firstly birth and descent and secondly through conjugality within the marriage institution and in-laws.

Families fulfil certain functions that enable a child to be fed, clothed and sheltered. The survival of the child is highly dependent on his or her family. Hence, families, through marriage, regulate sexuality and affect childbirth and childcare.

Marriage may not be a choice for everyone in modern industrial societies. The presence of state orphanages indicates that childcare is not necessarily familial. In addition, the changing status of women affects this as well. Homosexual unions, cohabitation, single-parent households have introduced diversity to the traditional notion of family. Through this lens we can see how families have evolved, in particular how "family" exists and has evolved in Singapore's history.

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#### IMPRESSIONS OF DIFFERENT ETHNIC FAMILIES BEFORE 1820

Some former colonial writers have described ethnic families who were early settlers in Singapore. How typical or atypical they were of other ethnic families of that time remains to be answered. However, these general perceptions by colonial writers are useful starting points in the study of the different types of families that existed in early Singapore.

One of the earliest accounts of native families in Singapore relates to Malay royalty in the 17th century. In 1609, Johann Verken, a German officer of the Vereenigde Oost-Indische Compagnie (VOC) from Meissen (Germany) aboard one of the Dutch vessels under Admiral Peter Willemz Verhoeff, related:

[Raja Bongsu] was in his appearance and body a well-proportioned person, rather tall, softly spoken, and fair skinned both on his body and his face. He had brought along with him thirty of his wives, which were of different appearances, and dressed in very fine, colourful clothing.<sup>2</sup>

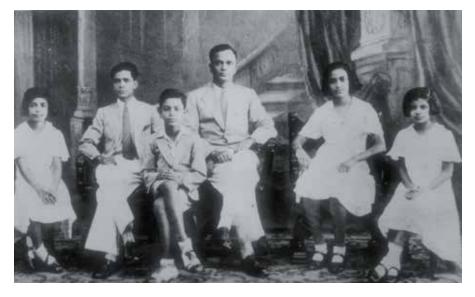
Demonstrating the existence of polygamous unions of the royal family in the area, the relationship between wealth, power and the means to have big families is established. Furthermore, Raja Bongsu had wives "of different appearances". This could indicate that they were of different ethnic backgrounds, groups, age or beauty. Apart from being a sign of prestige for the kings, the wives could have been part of exchanges between kingdoms.

The Malays, at this point, were a harder group of people to define. Linguistic and archaeological data suggest that people who could communicate in Old Malay and other Austronesian languages had "long possessed skills in pottery and weaving, as well as seafaring and the building of wooden canoes and houses; they grew rice and millet, kept pigs, used the bow and arrow and chewed betel". They "possessed a bilateral kinship system, with corresponding prominence in the role of women and relative lack of concern about descent as distinct from group origins".3 Mention of other groups of people and their families during this period is scant and few works mention anything beyond the existence of different types of traders and their trade.

#### ARRIVAL OF THE BRITISH

With the "civilising mission" as justification for colonialism, the British took an anthropological approach in their task of documenting the lifestyles and cultures of the natives. Through such understanding, the colonials hoped to colonise the natives better, inviting as little opposition as possible to their rule. The British discovered many indigenous people living in the forests or sea such as the Semangs or the Orang Laut. Indigenous families tended to live in small groups and lived wherever

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there was food. This small nuclear family type enabled families to move to wherever the food was. <sup>4</sup> The same could also be said about the Orang Laut (meaning sea people), which was another group of indigenous people who had lived in the area for centuries, <sup>5</sup> "almost the whole of their life being spent upon the water in a wretched little canoe... A man and his wife and one or two children are usually to be found in these miserable *sampans*, for subsistence they depend on their success in fishing."<sup>6</sup>

During this period, the British classified the Malays into two classes, the native and the foreign Malays. This division was more geographical than ethnographical. According to Frank Swettenham, in *British Malaya*, the Malays are descendants of people who crossed from the south of India to Sumatra, mixed with a people already inhabiting that island, and gradually spread themselves over the most central and fertile States [of Malaya]. Foreign Malays came to Malaya from the borders

of Kedah, Patani, Kelantan and the Southern Siamese states, including those from the seas—Acehnese, Javanese, Mandalings, Minangkabau, Palembang, Labuan, Borneo and Bugis. The native Malays are the descendants of the old Sumatran colonialists and intermarried with local aborigines and subsequent immigrants. There is an impression that the Malays live as part of the extended family,

... He never fails in respect towards his superiors. He has a proper reverence for constituted authority... His domestic life is almost idyllic. Towards his servants he is considerate and friendly... He is indulgent to his wife, and perhaps even more so to his children, whom he generally spoils. He supports his own relatives through thick and thin, but his sense of charity does not take him beyond the family circle. He is content to live in his own life in the

bosom of his family like, a "frog beneath a coconut shell [hatah di bawah tempurung]."

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#### INTERMARRIAGES AND POPULATION EXPLOSIONS DUE TO IMMIGRATION

Many of the low-ranking British officers who were posted to the Far East could not bring their families or women to the colonies as the colonial government was unwilling to pay for the maintenance of families. Eurasian groups such as Dutch Eurasians, Portuguese Eurasians and British Eurasians emerged as a result of intermarriages between these colonial servants and indigenous women. The Eurasian family type observed by John Turnbull Thomson comprised parents with many children, with servants living as part of the extended family, not different from Malay families.

The head of the family was of mixed race, but educated in Europe. His wife was of pure British blood, but was reared and educated in India. The husband had children before his marriage by native women; his wife had been married before, and had children by both her husbands. All lived together in great amity in the same house...The family have long settled in the country, held slaves prior to the abolition of slavery in the British dominions. Some of the slaves still clung to the family. One of them, an old woman, began to think of the advantage of creating a connection with her mistress's family...8

Population began to increase rapidly with the great influx of immigration, despite severe measures adopted by the Dutch to prevent subjects from sailing to Singapore. It was believed that the new arrivals were mostly Malays while the rest were Chinese. It was not until the mid-1830s that the Chinese outnumbered the Malays. The sex ratios in the Chinese and Indian communities were disproportionate from 1824 to 1860 due to the increase in the number of predominantly male immigrants from China and India.

In his report on population trends in Singapore from 1819 to 1967, Saw states that "there is reason to believe that the women enumerated in the early censuses did not come direct from China but were mixed-blooded [Baba] women". In addition, Charles Buckley mentioned that in 1837 "no Chinese women had come to Singapore and from China, and the newspapers said that, in fact, only two genuine Chinese women were ... small-footed ladies, who had been some years before, exhibited in England".10 Even J. D. Vaughn noted as late as 1876 that he knew of "no instance of a respectable Chinese woman emigrating with her husband".11 This confirms that the Chinese men came to Singapore without bringing their wives. As temporary settlers, it had been convenient to leave their wives and children in China. Furthermore, policies in China discouraged women from leaving in order to maintain ties with the overseas Chinese as well as to "ensure a flow of remittances from them". It was only during the 20th century that a movement towards a more balanced sex ratio was observed. The relaxation of immigration laws during the 1880s and 1930s saw large-scale migration of female immigrants from China and India.12

Meanwhile, the disparity in the sex ratio for the Chinese group created the Peranakan group. The Chinese who were born in Singapore tended to mix more with other ethnic groups and there was a trend "towards inter-ethnic marriages, especially between Chinese men and Malay women". This was clearly reflected in the existence of a group called "Babas". It was also likely that these unions were Sino-Orang Laut unions as observed by British colonial writers.

Hence, the Chinese female figure in the sex ratio that was reported by Saw is believed to be represented by Baba women. For the Chinese Peranakans during this period, the extended family was the norm.<sup>14</sup>

In the beginning of the 20th century, Chinese communities in Singapore and Malaya became more viable and self-sufficient. The Chinese tended to adhere more to their traditions and began to view "cultural mixing... as disruptive" but was tolerant of it as "it was an inevitable process that overseas Chinese communities had to undergo". 15 However, young Chinese girls were still seen as more desirable brides and hence the clans attempted to thwart the trend towards "Baba-isation". Through frequent contacts with China, the clan would make suitable marriage arrangements between an overseas member and a China girl and also legalise overseas marriages. It was observed that "by doing so,

the clans exercised considerable influence over the choice of spouses of its members, and prevented inter-dialect and inter-racial marriages from taking place."<sup>16</sup>

For Indians during this period, however, intermarriages within the different Indian language groups and between Indians and other racial groups were even rarer. The Indians would return home to marry and leave their wives with their extended patrilineal families in India. Their lives in the region were focused on employment and trade. They would bring their wives and children to Singapore or Malaya when they had children, especially sons whom they wanted to educate in Malaya and Singapore.

Hence, as opposed to the Malays, Eurasians and the Peranakan Chinese who were part of large extended families, the Indians and Chinese migrants on the other hand who came from extended families in India and China respectively were forced to set up nuclear families as a result of migration.

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#### **RISE OF INTERETHNIC ADOPTION**

In the first half of the 20th century, the rate of population increase gained momentum to about 3 percent until the postwar period (1947). The decade from 1947 to 1957 saw the return to the highest annual rate of increase at 4.5 percent since the 1840s. This could be attributed to factors such as the sharp fall of mortality rate, high fertility rate and large movements of people from Malaya to Singapore. By 1967, the Chinese sex ratio stood at 1,020 males per 1,000 females, which was more balanced than the Malay ratio of 1,045 and the Indian ratio of 1,684 males per 1,000 females. This prompted the formation of stable nuclear families among the Chinese and Indian groups.

Low use of contraceptives aided the high fertility rate of the 1930s. Child transfers and adoption were means of birth control for big families. Inter-ethnic adoption was a social phenomenon in 1930s Singapore and Malaya because of the existence of large settlements of Chinese, Malay and Indian families and for some, the existence of harmonious inter-ethnic relations. The adoption process was conducted through informal means, that is, through direct contact between parents and foster parents and "child adoption brokers" such as doctors, nurses and midwives.

Especially dominant was the adoption of Chinese female babies in Malay and Indian ethnic communities. This phenomenon was peculiar to Southeast Asia where Chinese families were able to give their baby girls to other ethnic groups while an "assisted female mortality" was practised in China. Families in the Indian diaspora were willing to overlook the origins of a Chinese female baby more than an Indian baby due to caste expectations imposed upon those born Indian.17 Malay families, on the other hand, preferred adopting Chinese babies to Malay babies because of "no real danger that the true parents [would] later claim them back" and "the girls are fairer in complexion".18 Official statistics could not reflect such inter-ethnic child transfers or adoption despite the institution of the Adoption Act of 1949 and the Children and Young People Ordinance of 1950 because there was no legal obligation to register the transfer of a child.19

This trend of inter-ethnic adoption and child transfers indicated that nuclear families were big. As mentioned, adoption and child transfers were means of birth control for big, poor families, especially for families that preferred sons. This "big family" type was to undergo another change during the post-colonial period.

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#### POST-COLONIAL ERA: INDUSTRIALISING THE FAMILY

During the post-colonial period, conditions such as poor sanitation, health issues, and fires - specifically the Bukit Ho Swee fire — provided an intimate link between marriage, gender, family and housing.20 Family types were particularly influenced by government policies on public housing. The provision of public housing by the Housing Development Board (HDB) for nuclear families was in part ideological as it put an end to the existence of kampongs or squatters, which were believed to be hotbeds of communism and communalism propaganda. In the first decade of its existence, the HDB built 106,000 units and the percentage of Singapore's population housed in HDB flats rose from 9 percent to 32 percent.

With the passing of the Women's Charter in 1961, monogamy was the only legal marriage practice recognised by the state.<sup>21</sup> Muslims were an exception since they were governed by Shariah Law. Thus began the creation of the nuclear families



in the 1960s and 1970s in tandem with birth control policies formulated during that period.

In the early years of Singapore's independence, the government was faced with the formidable task of providing education, health services and housing to a population that was growing rapidly due to the post-war economic boom. Family planning was thus regarded as a necessary measure in order for the government to adequately tackle issues arising from planning for the national economy to welfare services for the republic's citizens.<sup>22</sup>

The objective of the Singapore Family Planning and Population Board (SFPPB), created in 1966, was to exhort families to plan for smaller families. Its campaigns were aimed at less educated and lower income groups, encouraging them to have only two children so that their offspring would have a better chance in life.<sup>23</sup> The benefits of a small family were widely publicised through 35,000 posters and 100,000 leaflets, as well as a range of other publicity efforts.<sup>24</sup>

This anti-natalist stance was taken to encourage more women to join the workforce in order to increase the manpower needed for Singapore's industrialisation needs. The birth control policies were so effective that the birth rate declined from 6.55 births per woman in 1947 to 4.62 in 1965 to 1.7 in 1992.<sup>25</sup> With the two-child message entrenched, the family programme proceeded to focus its efforts on encouraging wider intervals between each birth, and dissuading young people from early marriage and parenthood.<sup>26</sup>

The population control efforts were a resounding success, but by the late 1980s, Singapore's falling birth rate became a cause for concern. This decline was further propelled by a trend among young and educated Singaporeans to delay marriage and children in order to establish a stable career. Former Prime Minister Lee

Kuan Yew felt that the drop in the birth rate among the well-educated would cause a "thinning of the gene pool". Lee felt that better-educated women should be mothers and cited the 1980 census that showed that women with secondary or tertiary education were having an average of 1.65 children, compared with uneducated women who were having three children on average.

Subsequent discussions that resulted from this issue pertained to the increasing number of unmarried women with tertiary education and the lower reproduction rate of the Chinese, particularly those with higher education.<sup>28</sup> This is still cause for concern today because of the perceived loss of talent due to the eugenics policy, a reduced labour force and increasing proportion of aged dependents in the country. To avoid the implications of a rapidly ageing population, the State implemented a slew of measures to reverse this trend by encouraging procreation through measures such as Baby Bonuses and "opening the economy" to talent from China, India and the Philippines.

## DECLINING MARRIAGES AND INCREASING TREND OF ONE-CHILD FAMILIES

Statistics reveal that the image of an ideal family consisting of two parents and two children is no longer the representative. In sum, the absolute number of marriages has declined by 1,718—from 26,081 in 2009 to 24,363 in 2010. This is a reverse in trend, as there was an increase in absolute number of marriages yearly from 2005 to 2009. General marriage rates continue to decline and single-child families are an increasing trend. This departs from popular perceptions that the average family has 2.1 children.

Among ever-married females aged 40 to 49 years who were likely to have had children, the proportion with one child

increased from 15 percent in 2000 to 19 percent in 2010, while those who were childless increased from 6.4 percent to 9.3 percent. With more ever-married females having one child or remaining childless, the average number of children born to resident ever-married females declined for most age groups. This has further consequence as there was also a delay in childbearing. While peak fertility rates among women were in the age group 25 to 29 years in 2000, it has since shifted towards the 30 to 34 years age group from 2002 onwards.

The number of divorces has also been rising, although at a more moderate pace in the last five years. Divorces and annulments increased by 19 cases from 7,386 in 2009 to 7,405 in 2010, a smaller increase compared to the increase of 170 cases from 2008 to 2009.

#### SHRINKING HOUSEHOLD SIZES AND **DUAL INCOME FAMILIES**

With falling birth rates, household sizes in Singapore have declined over the past 30 years from an average of 4.2 persons in 1990 to 3.5 in 2010. Figures indicate that Singaporeans may have less immediate family support as fewer members are staying in the same household to provide care for young children and the elderly.29

In terms of working status, the proportion of married couples where both husband and wife work accounted for 47 percent in 2010, up from 41 percent in 2000. The traditional arrangement where only the husband worked was less prevalent, with the proportion declining from 40 percent in 2000 to 33 percent in 2010. With the increase of married women entering the workforce, work life balance could be an increasing challenge for husbands and wives to negotiate as they juggle work, marriage and household demands.

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#### CONCLUSION

The functionalist approach in state policy influences the role and types of families in Singapore. There is now a greater reliance on the family especially with the demands of an ageing population in a non-welfare state like Singapore's. The state's recommendation of an inter-generational threetiered family in the 1980s was scrapped as more and more children lived apart from their parents. The HDB's Sample Household Survey in 2008 showed a decline in the proportion of younger married children who preferred to live with their parents or within close proximity of them.

In addition, current opposition to the 377A of the Penal Code, which criminalises sex between two consenting men, further pushes the boundaries of how the state defines families. How this would impact state definitions of family remains to be seen. It can be said that it will be a long time before the state accepts differing definitions of family. In the eyes of the state, the family has to be reliant and stable and alternative family models such as singles, homosexual couples and cohabiting couples are seen as a challenge to the state's views of stable families.

We need to develop a clearer sense of how past families actually functioned and what the consequences of family values and behaviours have been. In sum, "Good history and responsible social policy would help people incorporate the full complexity and tradeoffs and family change into their analyses and thus into action. Mythmaking does not accomplish this end."30 •

This article was reviewed by Senior Lecturer Saroja Dorairajoo, National University of Singapore, Department of Sociology, Faculty of Arts & Social Sciences.

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# Memories in Our Hands The Singapore Memory Project Exhibition

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#### WITHOUT OUR MEMORIES, WE WOULD NOT

be able to perform the simplest everyday task, create meaning in our lives, or construct our sense of identity—our identities are anchored to what we choose to remember of ourselves. While memories are personal and internal, derived from an individual's experiences in life, our memories are also cultural, drawing from and shaped by our social and cultural circumstances.¹ Just like an individual, a group without memories would not know how to distinguish itself from others, nor understand what it stands for, or its values.

Memories are often viewed differently from history. History, being the purview of academics, is thought of as guided by reason and therefore, objective. Historians rely mainly on information in documents and objects, allowing history to be verified. In contrast, memories are personal and considered as an authentic voice — since the person who remembers experienced an event first hand. Memories are associated with emotions, subject to revision and forgetting is often part of the process of memory formation. The distinction between history and memory is,

however, not so clear. Historians, after all, rely on materials or sources that are often memories of others. How history has been conceived or written is also shaped by the historian's perspectives, which are in turn formed by his or her memories. What both memory and history have in common is that they are both representations of the past interpreted through the filter of the present.

The growing interest around the world on memories, whether in the form of family histories, autobiographies or memorials, has been for some scholars the result of what is termed the "memory-crisis"<sup>2</sup>—"a crisis involving on the one hand, enormous attention to memory, and on the other, disjuncture between contemporary life and the remembered past".<sup>3</sup> The anxieties of a fast-changing world make us "speak so much of memory because there is so little of it left".<sup>4</sup>

Where are memories kept? Memory by its nature is "mortal, linked to the brain and the body that bears it". There are, however, memory warehouses in the form of libraries, archives and museums where memories are kept in material forms. The

Knowledge and remembering [are] in the hands and in the body.

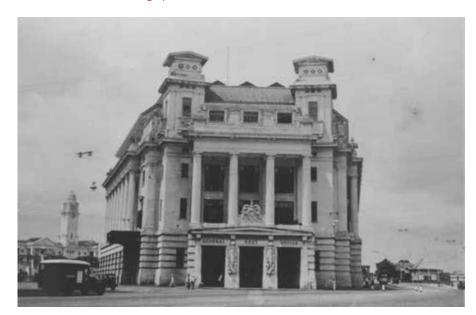
— PAUL CONNERTON<sup>6</sup>

Singapore Memory Project (SMP) is one such warehouse. Launched in August 2011, it is a nationwide initiative spearheaded by the National Library to capture the memories of Singapore — whether individual, organisational or collective. Memories are authentic voices enriching the telling of the past and providing another way of looking at Singapore aside from linear historicity.

This year, aside from collecting, preserving and presenting memories on its digital platform, the SMP team is working on a physical exhibition called "Hands". Unlike historical exhibitions that are often curated from the viewpoint of historians, memories will take centre stage in this exhibition.

### You've Got Mail!

Singapore's First Postmaster General





"I started in 1936 when I joined the post office. At that time, Singapore was under the Postmaster General based at the headquarters in Kuala Lumpur. During the Japanese Occupation, there was no foreign mail service, only internal mail service or to Malaysia. The mail to Malaysia was censored. We had nothing to do with the censorship. The censorship was carried out by the Japanese officers. The savings bank service was continued and we continued to withdraw money from the post office savings bank but we were paid in Japanese offices.

"When we became separated [from Malaya], we had new problems. The new problems for instance, the Housing Boards [flats] were coming up and a lot of correspondence was delivered. And postmen found it very difficult to go and deliver.

"So there was talk about having boxes in the flats and for that we had a lot of problems. The National Development Board was



rather reluctant to establish post office boxes, because they occupied space that could make them money.

"A new legislation was introduced that every household must have a postbox so that we postmen can deliver, and all the offices, the big buildings must have boxes for us postmen to deliver.

"And then we had difficulties because the rural area; there was a lot of development and the postman on bicycles could not go, so we introduced motorcycles to deliver the mail. But earlier on, there were problems of postmen delivery. They used to be chased by dogs.

"The postman had a wonderful job.
The motto was 'The mail must go on – rain or shine'".

Excerpts from an interview with Singapore's first local Postmaster General, Mr Bala Supramaniam, aged 95.





#### "HANDS: GIFT OF A GENERATION"

Memories are stored in our brains and are made visible through recollection and representation? in the form of language. However, memories are also embodied and expressed through our body and bodily practices. The focus of the SMP for 2013 is on the lives and memories of the people who lived through the country's nation building years.

To symbolise the lives of first-generation Singaporeans and their life's work, the exhibition will be built around the imagery of hands. Our hands are not only tools we use to shape the world around us, but also the means through which we interact with the environment and one another. They allow us not only to touch the world in which we live, but also allow us to be shaped and nurtured by others.

In keeping with the participatory nature of SMP, "Hands" has been conceptualised as part of its on-going engagement process. Through various programmes (via schools and the community), the public is encouraged to source, document and share memories. These include working with students or with SMP's volunteer group, the Memory Corps, who conduct interviews with people who have interesting stories to share. These all contribute toward our exhibition content. These memories will either take the form of a physical text with an accompanying photograph of the contributor's hands, or virtually on a digital wall of memories. Visi-



Memory is an act of "thinking of things in their absence" which may well be triggered in response to objects.

— SUSAN A. CRANE<sup>9</sup>

tors will be able to interact with the digital wall and be encouraged to share their own memories.

This exhibition could use objects to help to elicit and trigger memories. Often we think of objects in tangible forms, for example, a typewriter. However in "Hands", we have chosen to privilege the intangible objects in the form of sounds. These intangible objects will not be displayed as in a historical exhibition with

the relevant contextual information. Instead, we hope that the featured sounds would impress something upon each visitor so that the visitor can in turn share his or her memories with others.

Individual personal memories are always shaped by collective contexts. As an individual, we carry memories that we might not have experienced directly, such as memories of others learnt through family stories or school. The exhibition has been guided through this understanding of personal memories that are on one hand, personal and unique and on the other, reflective of the interconnections between generation, culture and the context of living in Singapore. "Hands" provides a platform for remembering and transmission, and is a site for interaction between the memories shared and the visitors who encounter them.

Visit "Hands: Gift of a Generation" at the Plaza, National Library Building from 7 August 2013 to 13 October 2013.



# Hello, Operator?

#### Story of a Telephonist

"I applied for the job but it took some time for the reply to come to go for the interview. So straight after school, I [worked] as a sales girl in Robinsons. After a few months, they called me, I went for an interview. It was not an interview per se; I went into a room with a phone and I was supposed to speak to somebody on the phone. They were recording it, they sort of wanted to gauge your voice. Then they called you back for a second interview where you met people. I was one of the few non-Eurasians at the Singapore Telephone Board; it was strictly for Eurasians.

As a telephonist, we answered the calls for [phone numbers] 100, 103. It was plug and call, there were no switches, nothing. The calls would come up glowing in a row and we would plug it in, take that call and dial the number for them. They needed assistance in dialing up so we assisted them. Then there were the public phones, where they called in to the operator for us to assist them and they dropped in the coins and we needed to count. People called 103 for assistance to

get phone numbers. Some of the callers [did] not even know the proper name [of the party they wanted to call]. We were pretty good with numbers, now I am lousy with numbers because all of it is programmed in the phone.

I switched from an operator to a supervisor. It was not an easy time for there was a lot of "she is the only Chinese" talk, because all the supervisors were Eurasian at that time. But by [the] time when I was made supervisor, other races were slowly coming in. After that, [I conducted] telephone courtesy and technique training, where people were sent in from all walks of life, including government officers, to learn from us. Then my VP [vice-president] decided to put me into marketina.

[During the 1964 racial riots] there [were] so many calls coming in, people were so worried. When there is such an emergency and too many calls [flood] in, calls get blocked. People call and call, can't get through, so they try and get the operator. So we were really flooded. We stayed there [for]

24 hours... We were brought to work in a bus. You know you were safe because you had security [everywhere], but what about your [family], what about your neighbours, inlaws... [my] own family was scattered... It was a really stressful time...

Our kampong people looked after our kampong people. It was only the outside kampong people that made mischief. The Malays and Chinese in [our] kampong were looking after each other. The people from other kampongs [snuck] in and hit people... But it was not neighbour against neighbour. In Telecoms, you had people from all sorts of life and so all these stories were told. Our cleaner was hacked."

Excerpts of an interview with Mdm Lucy Teo, aged 70, who worked as a telephonist at the Singapore Telephone Board. Mdm Teo worked with the organisation for 34 years.

#### ENDNOTES

- 1. Hodgkin & Radstone, 2003
- Term originated by Richard Terdiman in his publication Present Past: Modernity and the Memory Crisis. See Cateel & Climo, 2002
- 3. *Ibid.* p.6
- 4. Nora, quoted in ibid, p.6
- 5. Susan Crane, 2002, p.1
- Quoted in Cateel & Climo, 2002, p.19.
- 7. Crane, 2000

- 8. Cateel & Climo, 2002
- 9. Crane, 2002, p.2

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