

專題演講：

「日本國立國會圖書館採取有關保存及振興文化的政策」

Topical presentation:

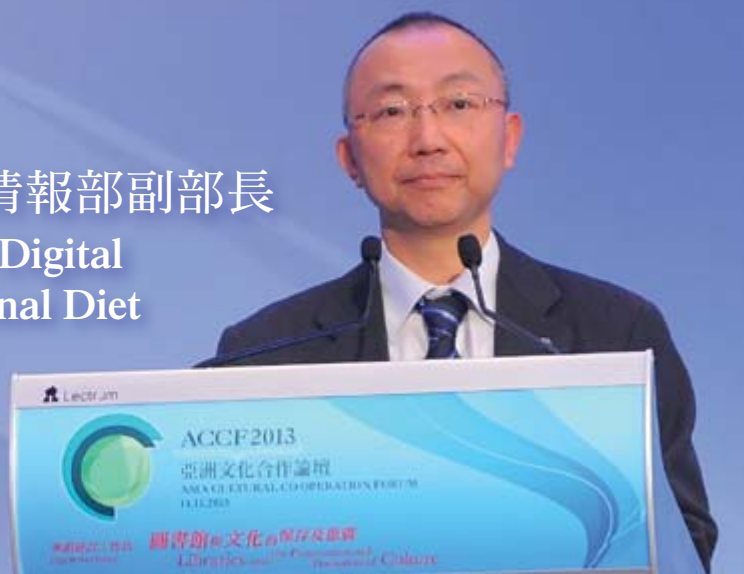
“The Efforts of National Diet Library in the Preservation and Promotion of Culture”

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我的名字叫做佐藤毅彥，我來自日本國立國會圖書館，簡稱NDL。首先，我想感謝大家給我機會，讓我可以在這個工作坊與大家分享我們所付出的努力。今天，我的演講內容包括以下幾方面：首先，我會介紹日本國立國會圖書館(NDL)的概況。然後，我會談及圖書館如何蒐集資料，尤其是近年的活動。第三，我會介紹一個我們較為關注的項目——「東日本大震災」庫藏計劃。第四，我會講及有關文化遺產保存的工作。最後，我會討論國會圖書館對文化遺產的應用，尤其是數碼資訊服務方面。

My name is Takehiko Sato. I am from the National Diet Library of Japan, or NDL for short. First of all, I'd like to express my appreciation for giving me a chance to report our efforts at this workshop. Today, I'd like to talk about the following topics. First, I will give you an overview of the NDL. Second, I will talk about how we collect materials, mainly about our recent activities. Third, I will talk about the NDL Great East Japan Earthquake Archive Project, which is particularly notable within our activities. Fourth, I will talk about the preservation of materials. Finally, I will talk about our library activities for utilization, especially our digital information services.

1. 日本國立國會圖書館概況

我首先介紹一下日本國立國會圖書館的概況。國立國會圖書館於1948年成立，是日本唯一的國家圖書館，是隸屬於國會的一個研究機構，我們共有890位員工以及3項設施。書庫的容量大概是1,840萬冊，有些人會認為我們的書庫面積不大，未能容納所有館藏，但其實我們有一些比較細小的館藏，例如縮微菲林，所以圖書館尚可足夠容納現有館藏。但是，隨著館藏量的增加，書庫預計幾年之後便會達到飽和，所以我們也需要擴建書庫。在2012年7月，國立國會圖書館訂立了2012至2016年的使命和目標，而其中有6項目標希望可以在5年內完成。第5號投影片便展示了圖書館的使命及第二項目標：採購及保護。

2. 圖書館如何蒐集資料

接著，我會談及國會圖書館採購文化遺產的情況。第6號投影片展示了國會圖書館蒐集文化遺產的歷史。自1948年圖書館成立以來，我們就開始按照法例蒐集日本國內的出版物，自始之後，我們便將蒐集的印刷品視為文化遺產，這種情況維持了很長的時間。但是近年來，某些出版物只



1. Overview of the NDL

I will introduce the overview of the National Diet Library. The National Diet Library was established in 1948. The NDL is the only national library in Japan. It is a research institute belonging to the National Diet. “Diet” means parliament. The National Diet Library is not the special library only about health. There are about 890 staff and 3 facilities. Stack capacity is about 18,400,000 volumes. The stack capacity seems to be smaller than the collection, so some people might wonder the collections overflow from the stacks, but there are many small materials in the collection, such as microfilms, so our collections are still all housed in the stack. However, our stacks will be full in a few years; therefore it is necessary to expand them. In July 2012, the NDL formulated the Mission and Objectives 2012-2016. It highlights the mission to be accomplished by the NDL and 6 objectives to be achieved in about 5 years under the mission. Slide 5 shows the mission and the second objective: acquisition and preservation.

2. How we collect materials

Next, I will talk about the NDL's acquisition of cultural assets. Slide 6 shows the history of the NDL's acquisition. In 1948, year of our establishment, we started acquisition of publications published in Japan based on legislation.



以數碼形式出版，所以在今日的日本，若不包括電子出版物，所收藏的文化遺產便不夠全面，因此，我們有需要擴大採購的範圍。由2000年起，我們根據法例，也開始蒐集離線的電子出版物，包括唯讀記憶光碟。由2002年，我們開始了一個實驗計劃，嘗試選取及蒐集一些獲授權的網站。到2010年，我們也根據新法例，開始把日本公營機構的網站也加入庫存。2013年7月起，我們又根據法例，開始收藏私人的線上出版物。

第8號投影片可以看到我們網站庫存的成果。我們稱這個網站蒐集計劃為「網站庫存計劃」(WARP)。這個項目自推出以來，我們所庫藏的網站共有7,500個標題，而「標題」是指網站供應者，至於網站內的項目則共收錄了接近60,000項，數據量接近250TB。而我們需要獲得每一個網站的擁有者授權，才可以將該線上網站存檔。現時，已獲授權的網上項目已達44,000項。

接著，我會介紹法定儲存線上出版物的情況，線上出版物包括了在互聯網上出版的書籍和期刊，又稱為電子書及電子期刊。從今年7月開始，為了儲存及善用文化遺產，國會圖書館也有法定責任收藏私人機構出版的線上出版物。我們在推行這項措施的時候，遇到很多反對的聲音，尤其是出版商，他們擔心我們的徵集會對出版市場帶來不良的影響。所以，我們現時收窄了蒐集館藏目標範圍，只會收集免費而且沒有數碼版權管理(DRM)的出版物。



Since then, we have considered acquisition of paper materials as the acquisition of cultural assets for a long time. But in recent years, publications published only in digital form have appeared. Now in Japan, it is not enough to acquire cultural assets that exclude publications in digital form. Therefore, we are tackling the expansion of the acquisition target of publications. From 2000, we started acquisition of offline electronic publications including CD-ROMs based on legislation. From 2002, we started an experimental project of collecting websites selectively with permission. From 2010, we started archiving public institutions' websites in Japan, based on legislation. From July 2013, we started archiving online publications published by the private sector based on legislation.

Slide 8 shows the results of acquisition of websites. We call the project of websites acquisition, Web ARchiving Project, WARP. The total number of websites we have acquired by now is 7,500 titles. Title means website provider, and the total number of websites' items is about 60,000. The data is about 250 terabytes. We need to get permission from each website owner to provide acquired websites on the internet. The items offered on the internet with permission come to 44,000.



第10號投影片顯示印刷品、網上資源及線上出版物等館藏的比例。圖左粉紅色部分顯示實物，例如傳統印刷品及離線電子出版物，圖右顯示數碼化的材料，在上方那一層是公營機構的出版物。有關這部分的出版物，國會圖書館需要按法例進行網站蒐集，而網站內的線上出版物也是我們的採購目標。下面那一層是指私人機構的出版物，國會圖書館只會去蒐集免費及沒有數碼版權管理的線上出版物，而圖書館現正嘗試採購那些要付費及受數碼版權管理的線上出版物。

3. 東日本大震災庫藏計劃

接下來，我想跟大家談的是我們國會圖書館的東日本大震災(Great East Japan Earthquake)庫藏計劃，名為Hinagiku。在詳細講述這計劃之前，我想先提供一些關於東日本大震災的背景資料。2011年3月11日，在日本近太平洋的東北地區發生了9級大地震，這是日本有觀測紀錄以來規模最大的地震，地震引發很大規模的災害，對日本社會、文化、經濟等各方面持續帶來巨大的影響。在地震之後，無論日本本土或海外人士均認為有需要將這件重大歷史事件記錄下來，並把歷史經驗流

Next, I will talk about e-legal deposit of online publications. Online publications are books and periodicals published on the internet, so-called e-books and e-journals. From July this year, for the purpose of deposits and utilization of cultural assets, the NDL has a statutory duty to acquire online publications published by the private sector. To implement e-legal deposit, we have received a lot of objections; especially the publishers wonder that e-legal deposit will bring undue influence on the publishing market. So we have limited the target of collection for the time being on publications which are free of charge, and without DRM (digital rights management).

Slide 10 shows the relation of paper materials, internet resources, online publications, etc. The left side of this picture in pink shows physical materials, such as traditional printed materials and offline digital publications. The right side of this picture shows digital materials. The upper step is an area of public institutions' publications. Concerning these publications, the NDL acquires websites based on legislation. Online publications in the website are also objects of acquisition. The lower step is an area of private publications. In this area, the NDL acquires only online publications which are free of charge and free of DRM. The NDL is trying to achieve acquisition of charged or with-DRM online publications.

3. The NDL Great East Japan Earthquake Archive Project

Next, I will talk about the NDL Great East Japan Earthquake Archive, Hinagiku. Before going into details, I'd like to give you some information about the Great East Japan Earthquake. On March 11, 2011, an earthquake of magnitude 9 occurred off the Pacific coast of the northeastern part of the Japanese mainland, which

傳給以後的世代。於是，國會圖書館便展開了「東日本大震災庫藏計劃」，向許多機構徵集並保存有關地震的資料，為日本及全球人士提供大地震的相關資料。這個計劃的目的是要透過東日本大震災的經驗和教訓，讓全國人民提高關注保存紀錄的重要性，並且推廣保存工作。我們把這個項目稱之為Hinagiku，即解作「雛菊」，這計劃便是帶著雛菊花語的信念：未來、希望及憐憫來支持災難復元。我接著會以Hinagiku作為這計劃的名稱。

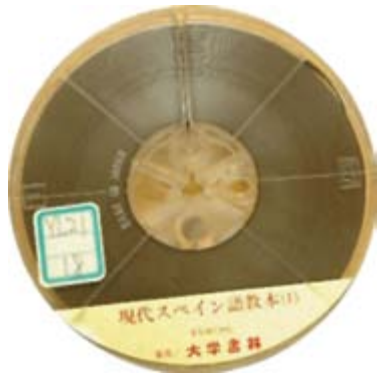
Hinagiku這個概念有3個主要目標。第一個就是履行國家機構的責任來蒐集、保存及發放有關東日本大震災的資料。第二，讓公營及私人機構一起蒐集和保存這次大地震的紀錄。第三，將有關的資料在本地及國外發放，並且流傳給我們未來的世代作為參考。

第15號投影片就是Hinagiku的概覽。圖左顯示由不同機構團體創建及持有的各種紀錄，中間部分就是我們國會圖書館Hinagiku庫藏。Hinagiku會採集及收藏紀錄，但它並不能包含所有資料。它可作為一個入門網站，讓使用者借助這個綜合平台，方便搜尋紀錄存放的位置。圖的右邊顯示一些例子，說明如何使用Hinagiku庫藏。Hinagiku這個計劃是跟17個組織合作，共建了大約240萬項可搜尋的資料。直至2013年10月，已有22個組織向我們提供資料，包括國會圖書館持有的書目紀錄，以及捐贈予國會圖書館的紀錄項目，而其中大部分是Hinagiku合作伙伴所提供的檔案。在這些紀錄中，較令人關注的收



is called the Tohoku region. It was the largest earthquake ever recorded in Japan. It caused extensive damage over a wide area. It continues to have a significant impact on Japanese society, culture and economy. Since immediately after the earthquake, the importance of passing on this historical experience to future generations has been pointed out in Japan and overseas. The NDL has been working on the development of “the Great East Japan Earthquake Archive Project”, to collect and preserve information related to the earthquake from many organizations, for Japan as a whole, and also to provide them to people all over the world. This project aims to contribute to building a nation, which has learned from the lessons of the Great East Japan Earthquake, to enhance awareness of the importance of preserving records, and to promote preservation activities. We have given the Great East Japan Earthquake Archive Project the nickname Hinagiku, which means “daisy” in English. We put the meaning of floral language of Hinagiku: future, hope and compassion in our project to support earthquake recovery. I will call our project Hinagiku in this presentation.

So, Hinagiku concept comprises three main objectives, which are, (1) to fulfill the responsibility of national institutions to collect, preserve and distribute records related to the Great East Japan Earthquake; (2) to



藏項目是國家及東北地區政府提供的網站，包含的項目已達9,500項。

4. 資料保存

接下來，我將會講及國會圖書館保存文化遺產的工作。首先，我想介紹國會圖書館作為國際圖聯保存保護中心(亞洲地區中心)(IFLA/PAC)的工作。保存保護中心是國際圖聯(IFLA)所訂立6項策略性工作的其中一項。目前，國際圖聯是由設於法國國家圖書館的總部及其他14個地區中心共同參與管理，包括日本。中心成立的目的是要鼓勵世界各地的圖書館參與以及推廣保存工作。我們國會圖書館作為亞洲的地區中心，不但要在日本進行推廣活動，更要向亞洲其他地區宣傳及推廣保存的工作。為促進國內及海外圖書館的合作，國會圖書館在1990年制定一個保存合作計劃，並在2006年稍作修訂，計劃的具體目標是發佈資訊及舉辦培訓課程。

我們一直積極地把館藏資料數碼化，以達成以下幾項目標。其一是要妥善保存材料，以數碼形式儲存資料比以原稿保存的狀況更佳。第二個目標是提供數碼圖書館服務，讓圖書館使用者可以透過互聯網瀏

coordinate with public and private organizations in collecting and preserving records in relation to the Great East Japan Earthquake; (3) to distribute these records domestically and internationally, and pass them on to future generations.

Slide 15 shows the utilization of Hinagiku. The left side of this picture shows various organizations and groups create and hold various types of records. The centre part is the Hinagiku of the NDL. Hinagiku acquires and holds records but not all of them. Hinagiku, as a portal site, identifies the locations of records and gives integrated access. The right side of this picture shows possible examples of utilization. Hinagiku is cooperating with 17 organizations and the total number of searchable data is approximately 2.4 million items. The number of organizations offering contents to the NDL is 22 as of October 2013. The data include bibliographic records of materials held by the NDL as well as other records donated to the NDL, but the majority are records of other archives cooperating with Hinagiku. Among these records, notable contents collected by the NDL are websites provided by the national government and the Tohoku region's local governments. These websites reach 9,500 items.

4. Preservation of materials

Next, I will talk about the NDL's preservation of cultural assets. First, I will introduce the NDL's activities as the IFLA/PAC Regional Centre for Asia. The IFLA/PAC is, at present, one of six strategic programmes developed by the IFLA, and administered by a local centre, located at the Bibliotheque Nationale de France, and 14 regional centres including Japan. Its aim is to encourage preservation efforts in libraries all over the world and promote preservation activities. The role of the NDL as the Regional Centre for Asia is to promote preservation



覽館藏，無論何時、何地或何人都可以享受這項方便的服務。

第20號投影片顯示了國會圖書館數碼化工作的進展。目前，我們已將90萬本由明治時代（始於1860年代）至1968年間出版的書籍進行數碼化，大概有9萬項在明治時代之前出版的刊物，即我們稱為「舊資料」的，也已被數碼化。至於期刊，我們會選取那些有明顯損毀的期刊進行數碼化。及至2000年出版的期刊，大約有105萬本已被數碼化了。而由1991至2000年發表的博士論文，大概有14萬冊也已經數碼化。

我剛剛談到以數碼化作為保存原始資料的方法，但數碼資料本身也要採用一些措施來保護。大概10年前，國會圖書館已研究如何保護這些數碼資料，尤其集中在離線出版物。可惜，我們圖書館暫時仍未落實一個保護數碼資料的計劃，所以，我們決定從實務工作中來發展保護數碼資料的計劃，但是，我們正面對一個難題：應

activities not only in Japan, but more particularly in other Asian countries. In order to facilitate cooperation among libraries at home and abroad, the NDL formulated a preservation cooperation programme in 1990 and revised it in 2006. The specific aims of the preservation cooperation programme are disseminating information and organizing training programmes.

We digitize our collections positively. The purposes of the digitization are as follows. One is preservation of materials. Materials can be preserved in good condition by using the digital data instead of the originals. Another purpose is to provide digital library services. Digital library services enable users to read the collections via the internet from anywhere taking advantage of the digital form, whenever, wherever and whoever.

Slide 20 shows the status of the digitization of the NDL. 900,000 books published from the Meiji era, that started in the 1860s, to 1968 have been digitized. Around 90,000 publications published before the Meiji era, which are called “old materials” in Japan, have been digitized. Concerning periodicals, those with noticeable



該怎樣保存這麼龐大的數碼資料呢？我們採納了開放檔案資訊系統參考模型(OAIS Reference model)作為其中一個方法。至於網站，我們準備跟國際網際網路保護聯合會(International Internet Preservation Consortium，簡稱IIPC)一起研究，在建立保存系統及保護措施的時候，我們也會將災難復元列在考慮範疇之內。

5. 圖書館對文化遺產的應用

最後，就如何使用文化遺產這方面，我會談一談國會圖書館提供的數碼服務。我剛才已按出版時期介紹過數碼化的工作進展。從第23號投影片可以看到我們提供數碼資料的數量。在90萬項館藏中，已有34萬項可以讓使用者經互聯網瀏覽，其餘的只能在圖書館內閱覽。此外，我們也將小部分已數碼化的珍貴古籍、期刊以及博士論文放在互聯網上。在合共228萬項的數碼化資料中，有47萬項資料已可以透過互聯網瀏覽。國會圖書館亦提供不同的途徑讓人瀏覽數碼館藏，包括在圖書館內閱覽「國立國會圖書館數碼館藏」，或者由互聯網瀏覽「從明治時代開始的數碼圖書館」。



deterioration have been selected for the digitization. About 1.05 million periodicals published up to 2000 have been digitized. Regarding doctoral dissertations, accepted between 1991 and 2000, about 140,000 volumes have been digitized.

Up to this point, I have been talking about digitization as a preservation measure of source materials. However preservation measures are also required for the digital information itself. From about 10 years ago, the NDL has made a research and study on the preservation of digital information, focusing on the offline electronic publications. Unfortunately, at present, digital information preservation planning has not been set up in the NDL. Therefore, we decided to get down to real work on the development of digital information preservation planning, but it is a difficult problem that how we preserve the enormous number of digital materials. The development of the system based on the OAIS Reference Model is one measure. About websites, we are going to examine together at the IIPC, International Internet Preservation Consortium. We will take the disaster recovery into account when we develop a preservation system, as well as preservation measures.

此外，國會圖書館還有一個數碼廊，展示一些圖書館獨特的館藏，並輔以簡單易明的解說，而且大部分都有英語註釋，大家可以看看。第25號投影片它顯示一些國會圖書館的珍貴古籍。有77項甚具歷史及文化價值的文獻已選錄在內。其中有一些令日本引以為傲的古籍，包括16世紀在日本出版的《論語》(Analects)及著名小說《源氏物語》(The Tale of Genji)等。我們還有一個圖畫書廊，介紹本地及外國的珍貴圖畫書，以及它們由起源到20世紀的發展情況，並配有圖像和聲音。一直以來，我們是不能將未經授權的數碼資料提供給圖書館使用者，但在2012年，日本的版權法修改了，讓日本的公共圖書館受到版權保護，容許國會圖書館將數碼資料提供給其他人。

關於圖書館數碼資料傳播服務，我想給大家說明以下三方面。首先，我們的對象只限於圖書館。第二，所傳播的數碼資料只限於不再在市場上流通的絕版資料，這樣就不會給出版業帶來不良影響。第三，在使用方面，使用者只能夠在圖書館內瀏覽及複製。國會圖書館準備在明年1月開始推行這項服務，我們現正積極籌備，並且已將大量的資料數碼化。今後，我們需要考慮如何更有效地使用這些數碼資料，我



5. Utilization of cultural assets

Finally, as the utilization of cultural assets, I will talk about providing services of digital information in the NDL. I have already mentioned the status of digitization according to the publishing periods. Slide 23 shows the status of provision of digitized materials. We have given access to 340,000 items out of 900,000 items through the internet. The rest of those items are accessible only on the premises. We also provide small portion of digitized materials of old and rare materials, periodicals, doctoral theses through the internet. 2.28 million items have been digitized in total and we give access to 470,000 items through the internet. The NDL provides access to the digitized materials in various ways. You can access to the NDL's digitized materials through "NDL Digitized Collections". This includes materials accessible on the premises. We also provide access to books and periodicals accessible through the Internet as "the Digital Library from the Meiji Era".

The NDL Gallery features digital exhibitions of the NDL's unique collections with easy-to-understand explanations. Most of the galleries have commentaries in English. So please take a look. Slide 25 shows the Rare Books of the National Diet Library. 77 materials of historical and cultural value have been selected. Among these, "Analects", which was published in Japan in the 16th century and the novel "The Tale of Genji" that Japan is proud of are also included. The Picture Book Gallery gives an introduction to picture books, their development from the beginning up to the 20th century, with images and sounds of domestic and foreign rare picture books. So far we couldn't provide access to the digitized materials without copyrights clearance, but in 2012, the copyright law of Japan was amended, allowing the NDL to provide access to the digitized materials under copyright protection to public libraries in Japan.



們現正考慮兩個方向：首先是將數碼資料轉化成文字資料，因為國會圖書館的數碼資料主要是影像，所以我們要將這些影像資料轉化成文字資料或音頻資料，讓視障人士也可使用我們的服務，這個項目現時仍在試驗中。另一方面，我們也要為私人機構人士制訂一些使用圖書館數碼資料的規則，因為私人機構的人員可能藉著專業技術及概念，創造更多方便的服務，所以，我們要為那些不再受版權保護限制的資料建立一些使用規則。

以上就是我們國會圖書館對於保存及振興文化所付出的努力。我希望透過圖書館服務，讓國會圖書館可與你們的圖書館有更多、更緊密的合作關係。我更希望可以向世界各地推介更多豐富的亞洲文化遺產，

謝謝大家！

There are three points for data transmission service of digitized materials to libraries. First, the target institutions are limited to libraries. Second, the digitized materials for transmission are limited to out-of-print materials, which are not circulated in the market. This is a condition for not having undue influence on the publishing market. Third, utilization is limited to browsing and replication in the library's premises. This service will be starting in January next year. We are now making preparations. The NDL has digitized an enormous number of materials. From now on, we need to come up with more efficient ways of utilizing these digitized materials. We are considering two directions of utilization. One is to convert digitized data to text data, basically the NDL digitized data are images. We will convert these data to text data or audio data to provide services to people with visual disabilities. We are now doing the experiments. Another is to establish rules for utilization of NDL's digitized materials by people in private sectors. It is possible that people in the private sector with technical skills and ideas may create services which are highly convenient. So we are working to establish rules for readily using the materials of which the copyrights protection period has expired.

That is my presentation on the National Diet Library's Efforts for the Preservation and Promotion of Culture. Achieving more close collaborative relationship between your libraries and the NDL, and through the library services, I hope that we can introduce more and more Asia's splendid cultural assets to the world.

Thank you for your attention and patience.