The greatest invention, Movable Metal Type printing and Jikji

What do you think the greatest invention throughout the entire human history?

This book will guide you to learn more about the development of printing methods and its remarkable contribution to civilization.
And we introduce you representative movable metal type printings.
You may know Gutenberg's 42-line Bible as the first metal type printed book.
However, JIKJI was printed with movable metal type in 1377 which was 78 earlier than Gutenberg's one.
Someone says the effect of JIKJI on world history was insignificant.
But, isn't this the westerner's perspective?
We gently suggest you to examine and recognize the value of JIKJI through this chapter.

The greatest invention, Movable Metal Type printing and Jikji

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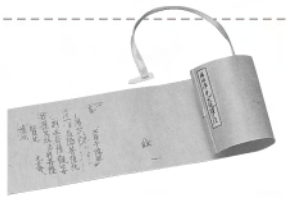

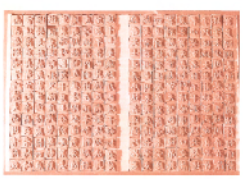

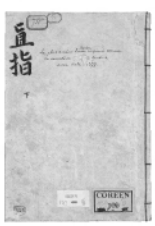

Chapter four : Old books of the world

Chapter five : VANK activities

The greatest invention, Movable Metal Type printing and Jikji

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Sponsor

Cheongju Early Printing Museum

The Voluntary Agency Network of Korea

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Greetings readers,

What do you think the greatest invention that influenced human civilization is?

The world's most influential news media, such as BBC, Wall Street Journal, Washington Post and Time Magazine reported that movable metal type printing was the greatest invention throughout the entire human history. All of these media recognize the contribution of movable metal type printing to civilization.

We, V@NK publish this magazine to help you learn more about the world's representative movable metal type printings and their remarkable contributions to our life. Furthermore, we introduce Korean printing methods and old books. The development of Korean printing methods is barely known to the world.

For instance, most people think that Gutenberg's 42-line Bible is the first book printed with metal type in the world. However, Korea's JIKJI was printed with movable metal type in 1377, which was 78 years earlier than Gutenberg's Bible in 1455. On September 4th, 2001, UNESCO registered Gutenberg's Bible and Korea's JIKJI as the Memory of the World.

In chapter five, you can grasp our activities about correcting distorted or wrong information on Korean printing. V@NK, as a non-governmental organization has corrected hundreds of distorted and mistaken statements by foreign websites, governments, textbooks and media. Through these activities, we also found errors about Korean printing methods and corrected it.

I hope you enjoy reading this magazine and recognize great value of movable metal type printing.

November 1, 2007
Hyeon-sook Im, Editor-in-chief,V@NK

Chapter One

From woodblock to the internet

How much do you know about printing methods?

You may barely know about this
and only heard your country's representative old books.
In this chapter, you can grasp the development of world's printing methods.
By reading this chapter,
you may widen your knowledge and view about printing.

B.C. 4000 | A.D | 500 | 1000 | 1100 | 1200 | 1300

Darani Sutra

751
Darani Sutra Printed With Woodblocks

1007
Dhatu-Karanda Darani Sutra Printed With Woodblocks

Dhatu-Karanda Darani Sutra

1011
Goryeo Dynasty's the First Tripitaka carved

1236
Goryeo Dynasty's second tripitaka, the Tripitaka Koreana carved

Goryeo Dynasty's Second Tripitaka

1377
Baegun-hwasang-chorok-buljo-jikji-simche-yojeol was printed in Heungdeoks a Temple in Cheongju with movable metal type

KOREA

Chronology of World Printing Development

WORLD

B.C. 3500
Papyrus book written in pictographs in Egypt

B.C. 100
Characters used in China

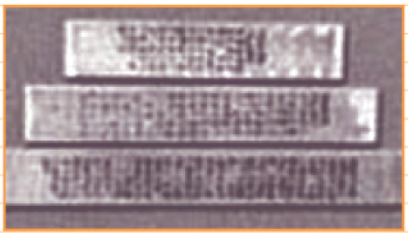
B.C. 238
Roman Letters used in Europe

105
paper-making method improved in China

270
Solid ink balls developed in China

700
Xylography first used in China

770
Hyakuman Darani printed with woodblocks in Japan



Hyakuman Darani

868
Diamond Sutra printed with woodblocks in China

B.C. 4000 | A.D | 500 | 1000 | 1100 | 1200 | 1300

1400	1500	1600	1700	1800	1900	2000

1403
Gyemi font created

1420
Gyongja font created

1447
Korean Alphabet font created

Gyemi font

1580
Gyeongjin font created

1618
Muo font created

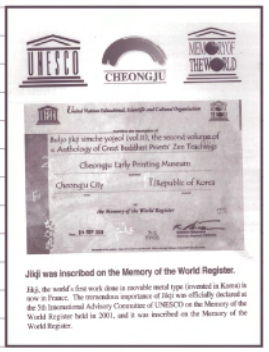
1677
Hungu font created

1773
Office Iron font created

1816
Jeonsa font created

1883
Modern Lead font created

2001
Jikji inscribed on Memory of the World Register, UNESCO



The Memory of the World Register

"We could get very good results such as selecting 21 legacies through the meeting in Cheongju where the oldest Metal Printed Book in the world was born."

Bendik Rugaas, the Chairman of the 5th Cheongju UNESCO Advisory Committee Meeting

1455
Gutenberg 42-line Bible printed with movable metal type

Johannes Gutenberg

1490
Copper font created in China

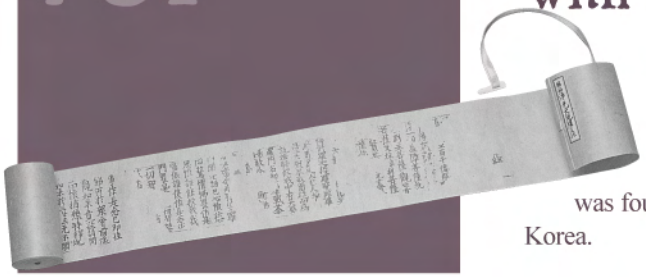
1592
Japan imports type printing methods from Korea

1807
Western movable typography first used in China

1856
Western movable typography first used in Japan

1400 1500 1600 1700 1800 1900 2000

751



Darani Sutra Printed with Woodblocks in Korea

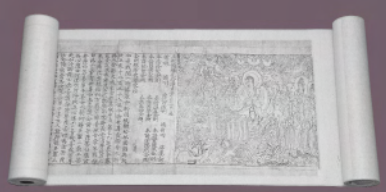
The Mugujeonggwang daedaranigyeong (Pure Light Darani Sutra) is the oldest extant printed document in the world. It was published in Korea before 751 A.D. during the Silla Kingdom. This scroll of Buddhist scriptures is printed from woodblocks. This Darani Sutra was found inside the Seokga Pagoda of the Bulguksa Temple in Gyeongju, Korea.

770

Hyakumanto Darani Printed with Woodblocks in Japan

The Hyakumanto Darani (One Million Pagodas and Darani Prayers) is a woodblock printing completed around the year 770 A.D. Empress Shotoku of Japan hand one million wooden pagodas constructed to enshrine the Darani Sutra inside to restore peace in the country. The prayers were then enshrined in ten major temples.

868



Diamond Sutra Printed with Woodblocks in China

The Diamond Sutra (Diamond Cutter Sutra) is a scroll, published with woodblocks by Wang Jie to pray for the souls of his parents. A central text of Indian Buddhism, the Diamond Sutra was first translated from Sanskrit into Chinese in about 400 A.D. and is still widely read. This Diamond Sutra is now on display in the British Library.

1041

Movable Type Printing invented by Bi Sheng

Supposedly during the years between 1041 and 1048, the first known movable type printing was created in China by Bi Sheng, a commoner, out of baked clay. Nevertheless, because it was made of clay, they faced difficulties in typesetting and printing. This prevented it from being widely used and further developed.

Jikji Printed with the Movable Metal Type in Korea

1377

In Korea, the movable metal type printing technique was invented in the early thirteenth century during the Goryeo Dynasty. One of its notable works, Baegunhwasangchorok Buljo jikjisimcheyojeol, usually abbreviated to Jikji(the Selected Sermons of Buddhist Sages and Seon Masters), was printed at the Heungdeoksa Temple in Cheongju in 1377 and is now kept in the National Library of France. It is the oldest extant movable metal type printing in the world.

Different Kinds of Books Produced Following Jikji

etc

During the Joseon Dynasty, movable metal type was relentlessly developed. Following Gyemi characters in 1403, various sets of books were published with other characters, including Gyeongja characters in 1420, Gabin characters in 1434, and Byeongjin characters in 1436. After the promulgation of Hangeul, the Korean alphabet, in 1446, the 'Wolincheongangjigok' was printed in Hangeul movable metal type.

Hangeul, the Korean Alphabet, Created by King Sejong

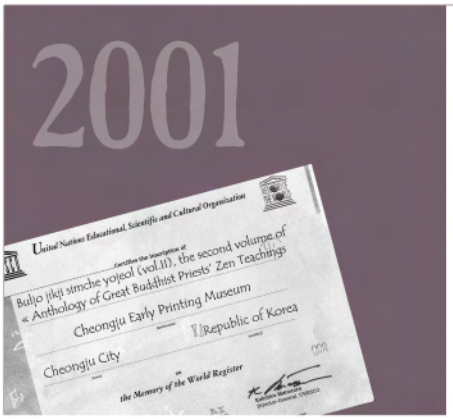
1447

The Diamond Sutra (Diamond Cutter Sutra) is a scroll, published with wood-blocks by Wang Jie to pray for the souls of his parents. A central text of Indian Buddhism, the Diamond Sutra was first translated from Sanskrit into Chinese in about 400 A.D. and is still widely read. This Diamond Sutra is now on display in the British Library.

Gutenberg's Bible Printed with the Movable Metal Type

1455

Gutenberg was the first in the Western world to invent the printing press by developing screw-type presses that had been in use for squeezing grapes and olive oil. He printed copies of the 42-line Bible between 1453 and 1455. His invention of the movable metal type technique was the motive of the Renaissance spread. The Protestant Reformation, the Industrial Revolution, and the transformation into modern capitalism.



Jikji, Inscribed on Memory of the World Register, UNESCO

The significant contributions of Jikji as the oldest existing metal printed book and its spreading influence on printing technology was recognized at the 5th International Advisory Committee of UNESCO on Memory of the World Register held in 2001. At that time, Jikji was finally inscribed in the Memory of the World Prize to individuals or groups who make significant contributions to the preservation and accessibility of documentary heritage.

21st century IT Korea!

Korea is one of the world's leading IT countries. Behind this success lies the development of diverse preconditions for printing techniques including paper-making technique, casting technique, stationery making and bookbinding, which paved the way for the emergence of Korea as the world's IT power. Indeed, Korea has topped the global 'digital opportunity index' out of 180 countries for two consecutive years. This index measures a country's degree of information technology advancement.

IT in Our Life!

It has been a daily routine for Koreans to listen to music flowing from MP3 players, use navigators, watch movies, and surf the Internet on notebooks and mobile phones with wireless Internet connections at any time, at any place. Also, it is common for students to take online courses, not to mention playing computer games. Information Technology is all around us!

Chapter Two

The greatest invention, Movable Metal Type printing and Jikji

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We gently suggest you to examine and recognize the value of JIKJI through this chapter.

Why is the movable metal type printing the greatest?

The world's most influential news media, such as BBC, Wall Street Journal, Washington Post and Time Magazine reported that movable metal type printing was the greatest invention throughout the entire human history.

For instance, in 1997, the Life Millennium which was published by Time-Life magazine reported 100 cases making world changed for last millennium. Time picked the invention of movable metal type printing as most important of the second millennium.

All of these media recognize the contribution of movable metal type printing to civilization. This invention stimulated popularization of Information and provoked collapse of information-monopolizing class. Hence, Renaissance, the Protestant Reformation, the Industrial Revolution and the Great Rebellion took place. These great events in human history affected on present-day and civilization.

How did the movable metal type printing influenced civilization?

Before movable metal type printing invented, woodblock printing was the best method to publish books. Publishers carved each pages of a book in each woodblock. As a result, they could publish only one book by woodblock printing in same time. It was the weakest point of woodblock printing. If they attempt to print other books, they had to carve many woodblocks again and again. This caused the high price of a book. Consequently, only the wealth and scholars possessed books.

On the other hand, it was able to print many different books in same time if publisher have a set of movable metal alphabet types. This enhanced mass production of diverse books at lower cost. More people began to read books and the public's desire to acquire new knowledge was stimulated. Therefore, many authors were able to spread their new ideas and knowledge among the public.

Martin Luther was the one of them. His book was widely read throughout Europe after he published it. As a result, the Protestant Reformation took place. Furthermore, another authors' ideas gained widespread support and led more changes and revolutions.

In conclusion, the invention of movable metal type printing enabled to spread information widely and massively.

Representative World's Movable Metal Type Printings

In Europe, Gutenberg published the 42-line bible in 1455 while, Korea's Jikji was published in 1377. Those two books were inscribed on the UNESCO on the same day. In Sep 4th, 2001, UNESCO registered them on the Memory of the World Register which is UNESCO's programme aiming at preservation and dissemination of valuable archive holdings and library collections worldwide. (See page 16 for more information about this programme)

Gutenberg's 42-line bible is the first book printed in Europe with movable types. From Mainz, the location of Gutenberg's printing office, the new technology spread all over Europe and the world. Of the originally 30 Bibles printed on vellum only four have survived in their complete form with all their 1282 pages.*

Koreans had already used the movable metal type in the early 13th century. In early 1200, "Jeungdoga" was printed with movable metal type. From 1234 to 1241, 28 copies of "Sangjeongyemun" were printed.

Introduction to Jikji

The original title of Jikji is Baegun hwasang chorok buljo jikjisimcheyojeol which means literally that Baegun hwasang copied and recorded meaning of Buddha's the most important words, Jikji.

Jikji's writer and publisher were different. Baegun hwasang was the writer. Venerable Baegun was born in 1289 and became a Buddhist monk in his early age. He was the Seon** master and

passed away in 1374. After his death, his pupils, Seok-chan and Daljam printed this book with movable metal type in 1377. Biguni***, Myodeok sponsored them by offering.

Buddha's the most important words, Jikji is abbreviation of "Jikji-insim-gyeonsong-songbul" which means you may realize the original nature of mind through meditation, and you can attain Enlightenment. It can be literally translated by several meanings: indicating accurately, honest mind and managing directly.


Heungdeoksa temple

Content of this book is the collection of Buddhist treatises and teachings. Baegun's pupils printed first and last volume of this book at Heungdeoksa temple of Cheongju city. Only last volume of this book was found and this volume has been kept in the National Library of France.

Why Jikji has been kept in France?

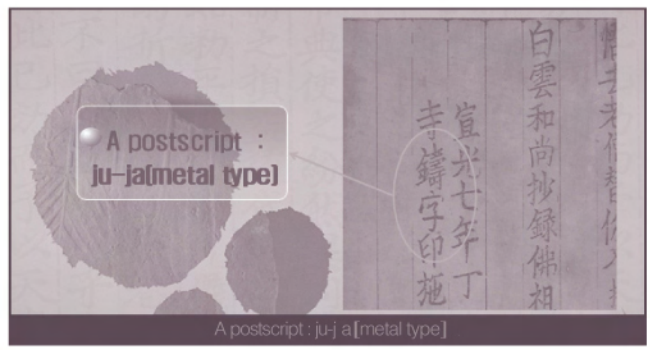
The first French ambassador to Korea, Collin de Plancy collected it and brought to France when he returned to his mother country. After his death, his collection was auctioned. A curio collector, Henri Vever bought and kept it. By Henri's will, Jikji was donated to the National Library of France.


National Library of France

The Korean historian, Dr. Byeong-seon, Park who was working for this library discovered it. Jikji was displayed in 1972 at Special Exhibition for 'Book' in Paris. There, experts recognized the value of the book. Jikji turned out the oldest existing book ever printed with movable metal type.

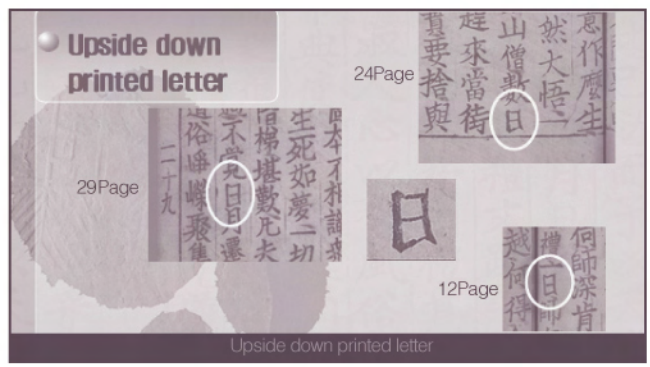
The proofs that Jikji was printed with movable metal type

After Dr. Byeon-seon, Park found Jikji, she researched on it and found various proofs that this book was printed with movable metal type. First, a postscript of the last page of Jikji prove it. It says 'Ju-ja', meaning metal type.



A postscript : ju-j a[metal type]

Second, upside down printed letter prove it. Its original shape is this 曰. If Jikji was written by handwriting, this upside down letters wouldn't be found. But same upside down letters was found throughout the pages of Jikji.



Upside down printed letter

* Source from UNESCO: http://portal.unesco.org/ci/en/ev.php-URL_ID=4084&URL_DO=DO_TOPIC&URL_SECTION=201.html

** In Korea, Zen Buddhism is known as Seon Buddhism.

*** In Korea, Buddhist nun is known as Biguni.

Friendly Korea

V@NK is making a steady progress toward its goal to build a bridge between Koreans and foreigners. 17,000 V@NK members are keeping in touch with their international friends and building friendships.

Our international members gave us many interesting stories about their experiences with Korean friends that helped them learn about Korean culture, history and the daily life of the people. Most impressive stories are presented to you in this magazine, Friendly Korea. You can also read letters that have been exchanged between foreigners all over the world and their Korean friends, and find answers to a lot of questions about Korea that you may have.

Moreover, you can grasp the essence of Korean culture through 'Han-style' that consists of Hangeul (Korean language), Hansik (Korean food), Hanbok (Korean clothing), Hanok (Korean traditional housing) and more, which will deepen your understanding of Korea. Also, five regions in Korea send their special invitations for you through this magazine. Experience what they want to show you in their regions.

Friendly Korea is ready for you to read at http://times.prkorea.com

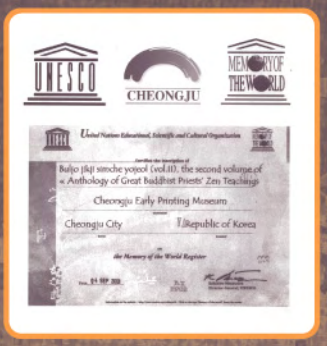
Chapter Three

Jikji in the World

JIKJI inscribed on Memory of the World Register,
UNESCO with Gutenberg's 42-line Bible on the same day.
By this inscription, this book is not only Korean's heritage but the world's heritage.
Eventually, the world recognized the value of this book.
In this chapter, we tell you the influence to civilization of this book
and the value as world heritage.
And the world leader and scholars tell you great value of movable metal type.

Jikji was inscribed on UNESCO's Memory of the World Register

The proposal of JIKJI for inscription on the Memory of the World was suggested during the 1996 seminar of UNESCO's Chungcheong Province Association for the first time. The conclusion of this seminar was that Cheongju city should propose inscription of Jikji as Memory of the World Register, because it was printed in this city.
Jikji was printed with movable metal type in 1377 which was 78 years earlier than the Gutenberg's 42-line bible and 145 years earlier than China's Chunchubeonro. Consequently, Jikji has more value than two of them as documentary heritage.



Hence, Cheongju city, the Early Printing Museum of Cheongju, UNESCO Korea Committee and UNESCO Chungcheong Province Association cooperated and submitted Jikji as the Memory of the World. Jikji was examined during 2001 5th International Counsel Committee session. By three organizations' efforts, it was inscribed on Memory of the World Register in Sep 4th, 2001.

Memory of the World Programme

This programme aiming at preservation and dissemination of documentary heritages and library collections. UNESCO established the Memory of the World Programme in 1992. Impetus came originally from a growing awareness of the parlous state of preservation of, and access to, documentary heritage in various parts of the world.

The Memory of the World Register lists documentary heritage which has been identified by the International Advisory Committee in its meetings in Tashkent (September 1997), in Vienna (June 1999), in Cheongju City (June 2001), in Gdansk (August 2003) and in Lijiang (June 2005) and endorsed by the Director-General of UNESCO as corresponding to the selection criteria for world significance.

The selection basis of Memory of the World is as follows: The first basis is ❶Influence, ❷Time, ❸Place, ❹People, ❺Subject s Theme, ❻Form and Style, ❼Social Value and the second basis is ❽Integrity, ❾Rarity. The registered heritages satisfying this selection bases and approved by International Counsel Committee is permitted to be registered on Memory of the World.

* Source from UNESCO's Memory of the World website.

What is UNESCO?

UNESCO is the specialized institution of the UN for the purpose of the forever peace by promoting international understanding and cooperation in the field such as education, science, culture and communication. Human beings were aware of that, through the past 2 world wars, the direct reason for wars was not political, military or economic conflicts between countries, but intellectual, cultural conflicts from each nation's distrusts and prejudices.

As a result, human beings believed that the intellectual elevation and the promotion of mutual understanding were a basis for the peace, and thus UNESCO was established for the purpose of promoting international peace and human beings' welfare, which is declared by the UN Charter, under the mindset that peace should be constructed on human beings' intellectual and moral association.

UNESCO/JIKJI
Memory of the World Prize

The UNESCO/Jikji Memory of the World Prize established in 2004. It was named after Jikji, the oldest metal type printed book. It will be given every two years to individuals or institutions that have made significant contributions to the preservation and improving accessibility of documentary heritage. It is UNESCO prize to further promote the objectives of the Memory of the World Programme and to commemorate the inscription of the Jikji, the oldest book with movable metal print in the world. The prize includes an award of US$ 30,000.

The first laureate,
the National Library of Czech Republic

The National Library of the Czech Republic was awarded as the first laureate of UNESCO/JIKJI prize. The history of the library is connected with the foundation of the Charles University in 1348. The first written references concerning books are documented in relation to the oldest Charles College, having been given a royal gift of manuscripts in 1366. The main mission of the National Library is twofold: to be the archive library for documents issued on the territory of the Czech lands and to be a public research library especially in the domain of humanities, pure natural sciences, culture, and arts. The library has more than 6 million vols, from which great parts are of irreplaceable cultural value not only for the territory of the Czech Republic, but also for many cultures of the world. The library is a leading institution in preservation and especially access to documentary heritage. It is a co-ordination centre for several national programmes in these areas incl. research and development. Website : http://www.nkp.cz

The impact of contribution to the preservation and accessibility of documentary heritage

The National Library has been able to run the supporting research and development projects and programmes (since 1997) and to persuade the Ministry of Culture to launch national programmes (in 2000) based on calls for proposals for Memoria and Kramerius activities. Thus the financial support of the state is combined with an on-going co-ordination and research activities of the National Library. All the output is used by all participants and the application of modern data standards widely ensured. Thanks to this, in the domain of preservation microfilming and digital access to endangered and rare documents, national, but also foreign (as many tools are downloadable free of charge) institutions may enjoy of unified approach in a high-technology area. National digitization training courses are taking place since 2003 both in Prague and regions.

The impact in flood recovery after 2002 on the national level is huge, because thanks to this and especially thanks to quickly launched measures, qualified advice, and co-ordination activities, hundreds of thousands of flooded documents (various libraries, archives, and museum documentation) have been rescued (large capacity freezing and mass and individual drying).

Internationally, the Memoria project experts provided a UNESCO digitization training in Prague in 1997, a regional Baltic training course in Latvia (for Estonia, Latvia, and Lithuania) in 1999, and on behalf of the OSI Budapest digitization training courses in Moldova, Mongolia, Kazakhstan, and Ukraine in 2003, while in 2004 in Serbia and Lithuania. Thanks to achieved results, the National Library is one of the first non-G7 members of Bibliotheca Universalis and it has been taking part in several access and preservation EU projects. Many institutions from the region and elsewhere took consultation in our library before starting their own digitization programmes of endangered documents. Good co-operation has been developed mainly in case of Baltic countries. The National Library is also a founding and supporting member (even if external to the group) of the SEEDI (South-East European Digitization Initiative) whose aim is to co-ordinate cultural heritage digitization activities in Serbia, Montenegro, Macedonia, Bulgaria, Romania, Greece, and Turkey. It is worth to mention also participation of National Library experts in the work of the Memory of the World International Advisory Committee (until 2000) and its Sub-Committee on Technology (since 1996 until nowadays).
Especially in digital access to rare collections the impact of the National Library has a very strong international dimension incl.

The library is a leading institution in preservation and especially access to documentary heritage.

its own digitization activities through which it provides access also to unique items of Arabic, Persian, or Hebrew provenance and thus, it contributes to virtual reunification of dispersed collections. Western manuscripts from various countries are processed as well. The library has also ensured preservation microfilming incl. selective digitization of the large unique collection of Russian and Ukrainian emigre periodicals (published in 1920s 1940s on Czech territory) preserved in the so-called Russian Historical Archives Abroad Library.

For all the above activities, the National Library has already received many foreign experts, researchers, and students who wished to complete their knowledge in the field. Some of them stayed with us for longer periods of time; they were from various countries incl. e.g. U.S.A., some Western European countries, but also Lithuania, Ukraine, Georgia, or Turkey.

Thanks to the richness of its unique Slavonic Library, The National Library assisted efficiently in completion of Bosnian collections in the destroyed National and University Library in Sarajevo (providing microfilm of destroyed items) and nowadays it is providing concrete help to the National Library in Baghdad in the field of restoration of rare documents damaged during the war.

The second laureate, Phonogrammarchiv, Austrian Academy of Sciences in Vienna.

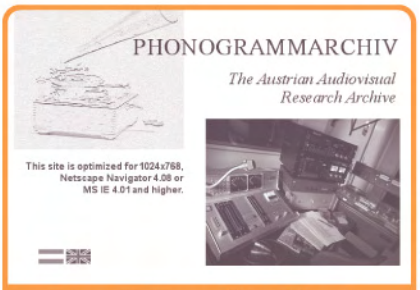
The Phonogrammarchiv is Austria's audiovisual research archive. Founded as the first sound archive of the world in 1899, it has expanded its activities to include, from 2001 onward, videographic research footage. For further information see http://www.pha.oeaw.ac.at/

The impact of contribution to the preservation and accessibility of documentary heritage

Ever since its foundation in 1899 the Phonogrammarchiv has taken many initiatives to develop audio preservation, and to assist in the development or the improvement of similar institutions worldwide. Early co-operation resulted in the foundation of the Phonogrammarchiv der Universität Zürich (1908) and joint projects with the Berlin Phonogrammarchiv before and during the First World War. In the late 1920s the Phonogrammarchiv was instrumental in setting up collections in Zagreb, at the Royal Dutch Academy in Amsterdam, and in

Rome (Discoteca di Stato). This co-operation has been continued in a systematic way from the mid-1970s onwards, when members from the archive became engaged in consulting audiovisual collections in Europe and worldwide.

At that time, the Phonogrammarchiv also embarked on the foundation of, or co-operation with international groups working on audiovisual preservation, eg IASA Technical Committee, Audio Engineering Society (AES) Subcommittee on Audio Preservation and Restoration, and within UNESCO.



Founded as the first sound archive of the world in 1899, it has expanded its activities to include, from 2001 onward, videographic research footage.

The Phonogrammarchiv has substantially contributed to the advancement of audiovisual archiving. One of the most significant contributions was its early advocacy for the paradigm shift in audio preservation from around 1990 onwards - namely to preserve the content by subsequent migration instead of pursuing the permanent preservation of the original carriers, which had to be given up for audio and video documents. In contrast to the extremely expensive Digital Mass Storage Systems employed since 1992 by Radio Sound Archives and National Archives, the archive developed a low-cost workflow for a small-scale manual approach to digital audio archiving, well-suited for developing countries under unfavourable climatic and financial conditions. This model has been successfully applied, or is under application, in cooperative projects with the following institutions:

- Music Research Institute, Chinese Academy of Arts (a Memory of the World-registered collection), partly funded by UNESCO
- Institute of Folklore of the Albanian Academy of Sciences in Tirana, funded by the Austrian Development Agency
- Institute of Folklore and Ethnography of the Romanian Academy of Sciences, funded by the EU
- St Petersburg Phonogram Archive (a Memory of the World-registered collection), funded by the Endangered Archives Programme

From 2001 onwards the archive has expanded its activity to the preservation of videographic research footage and has pioneered in the development of uncompromising linear video file archiving, modelled after the audio archiving workflow.

A specific competence has been developed in the transfer of historical sound recordings, specifically Edison cylinders and instantaneous discs. In the course of the last 20 years more than 3000 recordings of that kind have been re-recorded by sound engineer Franz Lechleitner. Amongst the most famous collections are

- The earliest cylinders from the Arab Peninsula (Leyden University Library, 300 cylinders)
- The Bergstässer Collection (early recordings from Cairo, University of Munich, 100 cylinders)
- The Bela Barok Collection of Slovakian recordings (200 cylinders)
- The Zhirmunski collection of the St Petersburg Phonogram Archive (300 instantaneous discs)
- The oldest cylinder collections of Latvia and Lithuania (300 and 100 cylinders respectively)
- The Lachmann Collection of the Hebrew University of Jerusalem (300 cylinders and 1000 instantaneous discs)
- The earliest cylinders of Georgia (containing Georgian polyphony, registered on UNESCO's Intangible Heritage List, 500 cylinders)

Thanks to Franz Lechleitner's activities this previously unplayable important documentary heritage has become accessible. An ongoing co-operation assists the Phonogram Archives in Berlin and St Petersburg to transfer their Memory of the World-registered early cylinder collections.

The Phonogrammarchiv is also widely involved in training for audiovisual preservation. More recently seminars took place in Europe, China, Singapore, Central Asia, Ethiopia, the Caribbean and Mexico. Engaged in these training activities are Nadja Wallaszkovits, Franz Pavuza, Franz Lechleitner and Dietrich Schüller.

* Source from UNESCO's Memory of the World website.

Former vice president of the United States, Al Gore's statements about Korean printing

In 1995, Brussels, Belgium at the G7 Telecommunication Ministerial Conference : Koreans invented the movable metal type printing for the first time in the world, but unlike in Europe, It failed to develop Korean culture through its invention.

In 2005, the Seoul Digital Forum : Korea's digital revolution is historically the second gift. Korea gives to the whole world following its invention of the movable metal type printing method.

Interview with the Director of Phonogrammarchiv of the Austrian Academy of Sciences, Dietrich Schüller

Jikji is the first book printed with movable metals. This was the revolution in the dissemination of information because from that moment on book it was very easy to spread information to wide public. Therefore, it also can be called internet of the Middle Ages.

Interview with the UNESCO's Memory of the World programme specialist, Joie Springer

UNESCO's declare for to early printing museum to Cheonju city and Republic of Korea in General for their attention and care given us and the support promoting preservation working General. Since the inscription of Jikji book on the Memory of the World registered in 2001. We have seen increased in the amount of the world that goes into the preservation throughout the world for this year particularly glad that of the effort set to be we received from Korea and Cheongju in general.

Interview with the Chief of Cheongju Advisory Committee

Bendik Rugaas in Norway International Library took on the Chairman in the 5th Cheongju UNESCO Advisory Committee Meeting held in Cheongju, following the 4th Review Meeting, from 27th to 29th in JUN 2001. We interviewed with Bendik Rugaas and heard about the background and screening process of registering Jikji in the World Registered Legacy.

Officer of Cheongju : Can you tell me your impression of the results and Cheongju?

Bendik Rugaas : We could get very good results such as selecting 21 legacies through the meeting in Cheongju where the oldest extant movable metal type printed Book in the world was born. I also confirmed that the future of Cheongju, the print-cultural city, and world registered legacy are very bright when I saw lots of children visiting the Early Printing Museum of Cheongju.

Officer of Cheongju : In order to be selected to the World Registered Legacy, they should pass a few major selection bases such as the effects and social values. Which bases did Jikji pass?

Bendik Rugaas : Jikji is the oldest existing Metal Printed Book. It has influenced on human beings and spread out, so it was recognized to be the most influencable legacy. Additionally, the rarity was mainly considered in selecting it, because there is only one volume in France right now.

Officer of Cheongju : I heard that Jikji and Gutenberg's Bible were selected in this screening simultaneously.

Bendik Rugaas : Jikji and Geternberg's Bible are the oldest existing eastern and western Metal Printed Books, respectively. They have changed human beings' recording cultures completely. UNESCO Advisory Meeting recommended them to be registered under the spirit of The Memory of The World. After going back to UNESCO Headquarter, I will try to seek for the ways that can spread and preserve the old printing cultures.

We has published this magazine to help you learn more about the world's representative movable metal type printings, the development of Korean printing methods, and their remarkable contributions to our life.

You can download this magazine's contents from our organization's website, **http://www.prkorea.com/jikji/jikji.pdf.** PDF is Adobe acrobat reader file. You can search specific information of our magazine from this file.

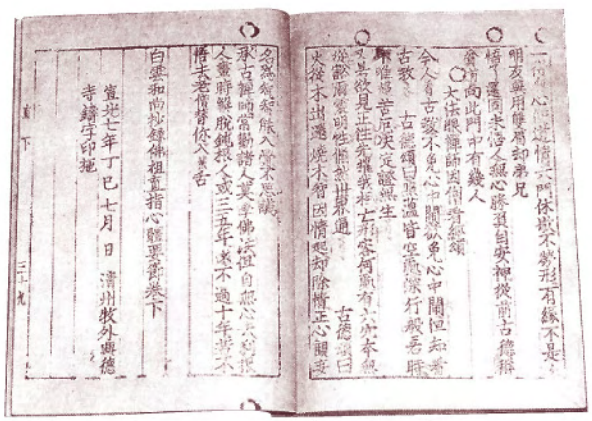
If you want to introduce our work on your website or textbook, please don't hesitate to contact with us at

jikji@prkorea.org.

Special column

The Influence and Importance of the Korean Metal Type

Writer: Gi-tae Park, VANK
Co-writer: Cheol-hee Lee, Director of Cheongju Early Printing Museum



Though the Korean Metal Type was created earlier than Gutenberg's, there are someone who think that it is of less significance because it was less influential from a historical point of view.

I admit that it can be seen like that but isn't this from a western perspective? Because mankind evolving from a western basis, views of the west have been enormously influential to the world.

However, there are something in Asia that the westerners don't know. Hence, the value is under rated. Jikji, the oldest extant movable metal type printing, is a good example. We would like to enlighten the world with the hidden values that await to be found. This is how we got to start this kind of work.

From this point on, it is my humble wish that you accept the following not as a contradiction but merely as information of the unknown Korean as well as Asian values directed to ones of the world who are yet unfamiliar to content of this nature.

The main reason for Koreans using the Metal print was to, as Gutenberg. distribute mass information quickly. The fact that Koreans were, in early 13th century, 200 years ahead of Gutenberg, and widely using this technology is a very

significant fact considering the importance of information distribution. I think that the people of the world should be aware of this. This is why UNESCO registered Jikji, which proves that Korea invented and used the Metal type, and Gutenberg on Memory of the World Register in 2001 .

Mr. Bendik Rugaas, Chairman, Norwegian, Memory of the World National Committee, explains the historical significance.

"Jikji is the oldest existing Metal Printed Book. It has influenced on human beings and spread out, so it was recognized to be the most influenceable legacy. Additionally, the rarity was mainly considered in selecting it, because there is only one volume in France right now."

In the east, the fact that the Korean Metal type was imported to Japan and used to print books is recorded in Japanese history. This shows the fact that Korea's Metal type influenced Asia.

For a more detailed example, in 1592, the Japanese General Poong shin soo gil plundered the Copper type and in his journal 2nd year (1593), it says that he offered this to the Emperor Huyangsung. The Emperor commanded the printing of Gomun hyokyung. This is recorded in Shikyung Kyungki but there is no existing copy. Using a wooden type in 1597, Kwonhakmun was printed. In the preface, it states that the wooden type printing method was from Joseon dynasty, the ancient dynasty of Korea.

After Jikji, it was passed down, improved and used by more Koreans. This is a detailed reference in the Korean history book. In the Joseon dynasty, the printing technology continued to improve. After Gyemija in 1403, Gyeongjaja in 1420, Gabinja in 1434 and Byeongjinja in 1436 were used to print various books. After Hangeul was promulgated in 1446, a Metal type was used in 1447 to print Wolinchungangjigok.

From a western view, more research is needed to see how much influence this was inflicting. Also, there are some historians who claim that Gutenberg's metal type casting method was from Korea.
For reference, this is what Al Gore, USA's former vice president, said in 2005 in his opening speech at The Seoul Digital Forum 2005. He said that he was surprised with Korea's advanced IT technology and he added saying, "Many know Gutenberg as the inventor of printing but this technology was obtained after the Pope's delegation after visiting Korea."

He also said, when Gutenberg invented printing press, he had talked with the Pope's delegation. He was friends with the delegation who brought him many different records of printing technology." He added that The Swiss printing Museum was the source of his information. (Yeonhap News May 19, 2005)

1) I would like to conclude that the Korean metal type was for swift distribution of mass information, just like Gutenberg.

2) Also in 2001, UNESCO registered the Jikji and Gutenberg for changing the world by informing massive amounts of information.

3) Last, the Korean Metal type influenced publishing books in Japan and this can be thought of as Jikji influencing Asia.

Therefore, Gutenberg and Jikji influenced the history of man (western history). But, besides comparing these two and the American and European view that Gutenberg has more significance than the Jikji, I believe that we need to study the significance of the Korean Metal type and look upon this from a worldly view.

And as we do this, it is my hope that there is a balanced understanding of the Eastern Jikji and the western Gutenberg, both Metal types of the East and West, and that this is reflected in textbooks, encyclopedias and in the Internet.

I wish that this article will change your views on the Jikji and furthermore be of some help in making people from all corners of the world learn the right facts about Jikji.

Paths to Peace

'Paths to Peace' (P2P) is a webzine that seeks to build peace in Asia through a People to People (P2P) network. Our firm belief is that peace in Asia can be achieved through the collective efforts of Asians to understand each other.

P2P provides a space where you can connect to other Asians. Represent your voice about conflict and peace issues that your country faces, and listen to the voice of others about their issues. By engaging in intercultural dialogue and information exchanges through P2P, you can contribute to spreading the culture of peace throughout Asia.

P2P is a participatory webzine that is created and developed by your participation, your contributions, and your ideas for peace. It will be through your participation and your commitment that we will pave paths to peace in Asia. Get involved in our grassroots peace-building project! Speak out for peace!

'Paths to Peace' is always available for you
to participate in making peace at:

http://www.prkorea.com/p2p

Chapter Four

Old books of the world

There are valuable old books in each country which reflect their culture, life style and society.

If you look into these books, you may learn their ancestors' wisdom. In this chapter, our international members contributed their articles to introduce their nations' valuable old books and the development of printing methods.

Gutenberg's 42-line Bible, Germany

Writer :
Jacqueline Behrendt

1. The Beginning of German Printing History

The beginnings of the art of printing can be found in Germany, East Asia, Babylon and Rome. The first and oldest printed books were constructed by using the so called 'Blockdruckverfahren', where the single sites needed to be cut into a printing plate and then were deducted.

But this was not the book-form, we know today. The art of printing with all his economical, cultural and historical effects developed in the way we know them today as cultural minting Information and Communication Technology in Europe.

With the discovery by Johannes Gutenberg in the 15th century, the art of printing spread out in whole Europe within a few years and after the centuries around the whole earth.

2. About Johannes Gutenberg

Johannes Gensfleisch, named Gutenberg (born in 1400 in Mainz or Eltville ; died 1468 in Mainz) is known for his discovery of the art of printing with movable metal-types in Europe and of the mechanical printing.

By the using of movable types, he set new revolutionary yardsticks for printing books and initiated a revolution in Europe.

His work is considered as key item of the Renaissance, specially his main work the 'Gutenberg Bible' is know for the high aesthetic and technical quality.

2.1 Gutenberg's Invention

It was already printed before Gutenberg by wooden pressure. On this occasion, paper was laid on the worked on and with color provided wooden floor and rubbed off a costly and protracted procedure.

Basic idea of the invention of Gutenberg was the decomposition of the text in all single elements like small letters and capital letters, punctuation marks, ligatures and abbreviations as they were generally usual from the tradition of the medieval authors. These single elements were poured as side-wrong characters in any number, were joined, in the end, to words, lines and sides. Prototype for every letter was the stamp.

In the front end of a steel pencil the sign was cut, so that a side-wrong exact relief arose. Now the perspective stamp, the Patrize, in a rectangular block of a hammer from softer metal, as a rule probably copper, i.e vertically with the blow of a hammer was 'beaten off'.

So, generated matrix had to be reworked and be straightened, so that a right- angled cube with straight sides originated. The side-right picture should have a uniform depth, which is why the surface with a file was worked on. To manage the downpour of character, Gutenberg developed the hand pouring instrument which of an end was closed by using the matrix. After the downpour of the characters in the hand pouring instrument the other end had to be removed.

Every character had a hyphenation point, so that all characters automatically received the same height. The hand pouring instrument, the most significant part of the invention, enabled to pour the amounts required in each case in the most different characters in the quick change. The crude metal was an alloy from lead, tin and other


Johannes Gutenberg

admixtures, quick cooling off and a sufficient durability under the high pressure of the press guaranteed.

The printer press which caused towards till then known compression a huge acceleration of the printing process was a spindle press with special equipment for the actual and steady transference of the printing format of the form of the paper or also the parchment.

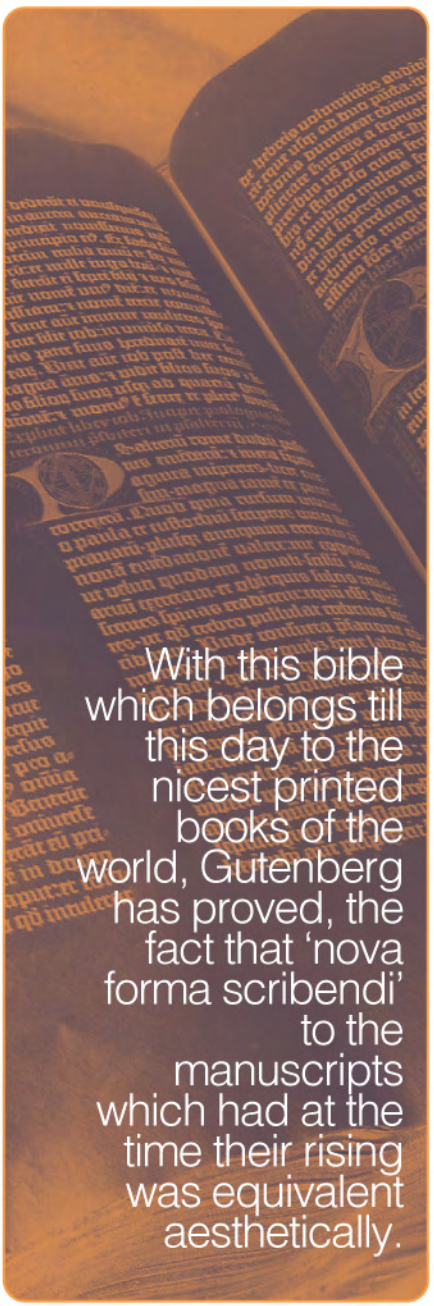
2.2 The 'Gutenberg Bible'

The Gutenberg-Bible, also known as 'B42' or 'B-42' (because of the 42 lines) was made in the years from 1452 until 1454 in Mainz.

As a coronation of Gutenberg's pressure art Bible is to be looked the 42 lines. The 2-volume work with a total of 1282 sides originated in the blossom of his creating, with the help of about 20 employees.

Gutenberg has poured 290 different figures for this Bible. The colored initials and signs were inserted later by an Illuminator and a Rubrikator. 150 were printed by 180 copies presumably on paper and the remaining 30 on precious parchment. Today, there exist another 48 copies from what 2 are in the possession of the Gutenberg museum in Mainz, Germany.

With this bible which belongs till this day to the nicest printed books of the world, Gutenberg has proved, the fact that 'nova forma scribendi' to the manuscripts which had at the time their rising was equivalent aesthetically. The development of the black art brought a layout in the written world. The spreading of knowledge promoted the economic progress and became a landmark in the direction of modern times.




Gutenberg's
movable metal types

Kronika trojánská, Czech Republic

Writer : Tomas Popek

Beginning of Czech literature is set around 863 AD, when Old Slavic, the first literary Slavic language, was invented. First texts were usually legends about Saint Wenceslaus (Czech: Svaty Vaclav) who was the main patron saint of the Czech state.

One of the most interesting books of Czech medieval age is Chronicle of Bohemians (lat. Chronica Boemorum) written in Latin by Cosmas of Prague. It is very unusual chronicle. It's sorted by date but, there are not only brief records of events but narratives which are sometimes quite long. It consists of three books. First one contains Czechs mythic legends. The second book describes Bohemian history for the years of 1038~1092. The third book (1092~1125) starts with a description of the time of instability and bloody civil wars. Chronicle ends in 1125 when Cosmas died.

In the early 13th century, the Devil's Bible was published in the Benedictine in Bohemia (lat. Codex Gigas). It is the largest extant medieval manuscript in the world. It includes the entire Bible in a pre-vulgate version, St. Isidore of Seville's encyclopedia Etymology, Josephus' Antiquities of the Jews, Cosmas of Prague's Chronicle of Bohemia, a calendar with necrology, magic formulae and many other local records. The entire codex is written in Latin. The manuscript includes illuminations in red, blue, yellow, green and gold.

The legend says that the scribe was a monk who in order to forbear this harsh penalty promised to create in one single night a book which including all human knowledge. That night he sold his soul to the devil for help. After completing of manuscript the monk added the devil's picture out of gratitude for his aid.

During the Thirty Years' War, was the entire collection was taken by the Swedish army as plunder. It was returned after centuries in Stockholm on September 2007.

The chronicle of Dalimil(Czech: Dalimilova kronika) is the first chronicle that was written in Czech language. This was written by unknown author. The chronicle finished before 1314, but it was published including the entries of later authors describing the events till 1319.

The initial printed book is in dispute among scholars. The most often mentioned one is Trojanska Kronika, translation of Quidona de Column Historia Troiana. It is a book about fight of Troy printed in 1476. Historians classify it as imaginative literature.

Devil's Bible (lat. Codex Gigas)

Source : The Royal Library and the National Library of Sweden

Doctrina Christiana en lengua Espanola'y tagala, the Philippines.

Writer : Timi Canuel

The Spanish ruled the Philippines for 333 years. One of their aims in colonizing the country was to propagate Christianity. And in order to realize this objective, many Spanish missionaries studied, learned, and mastered the Tagalog language which is the native and best language in the islands and eventually they published, 'Doctrina Christiana en lengua espanola y tagala', the very first book printed in 1593. It was a little book of prayers written by Franciscan Friar Juan De Plasencia. He derived its name from the Latin term 'Doctrina Christiana', meaning the "teachings of the church". It was printed in Gothic letters and Tagalog characters on a rice paper. This type of paper is inferior in quality because of its brittleness and without resistance. At that time, rice paper was the only kind that the Filipinos used not only for printing but for all manner of writing.

In fact, Doctrina Christiana has two versions; the first version was the Spanish-Tagalog book which refers to the Doctrina Christiana en lengua espanola y tagala. This book depicts the old writing system called 'baybayin' and it also contained the basic belief of the Roman Catholic faith, the Ten Commandments and the customary prayers such as Ave Maria, Credo, and Salve Regina.

On the other hand, the second version was named 'Wu-chi t'ienchu cheng-chiao chen-chuan shih-lu' also known as 'Shi-lu or Veritable Records' written in Chinese by Dominican Friar Juan Cobo. It consist of records of authentic tradition of the true faith in the Infinite God, by the religious master Kao-mu Hsien' as well as data about plants, animals, astronomy, and geography,

Due to the inexistence of the printing press in the country during that period, the Spaniards brought the arts of printing to the Philippines using 'Xylography' or 'Wood engraving' method, meaning, each page of text is printed from one wood-block which was carved by hand. Along the inner margins of some pages are vertical lines which were made by the inked edge of the block, and the grain of the wood has caused markings or patterns to appear in the printed portions throughout. As a result thereof, the above-described books were printed in 1593 and were considered as the first products of this method of printing.

There were also other books that have been published before the end of the 16th century but a new approach was used in printing these materials called the 'Typographic method or movable type of printing'. Most of these writings were on the teachings of the church, some where vocabularies, while the rest were historical. 'Libro De Nuestra Senora Del Rosario en lengua y letra de Filipinas', published in 1602 and 'Libro de los Cuatro Postrimerias del Hombre', published in 1604, both works written by Dominican Friar Francisco Blancas De San Jose and were considered as the first books printed using the movable type approach.

Philippine literary works did not stop here. As a matter of fact, thousands of titles of books have been created and published from 1593 up to the present time in the Philippines resulting to the improvement and development of the printing system and publication industry of the country.

Due to these evangelical works of the Spanish missionaries, these first books particularly 'Doctrina Christiana' were printed and had been an integral part of Philippine history thus our beloved land became 'the only Christian country in the Far East'.
MABUHAY PILIPINAS!

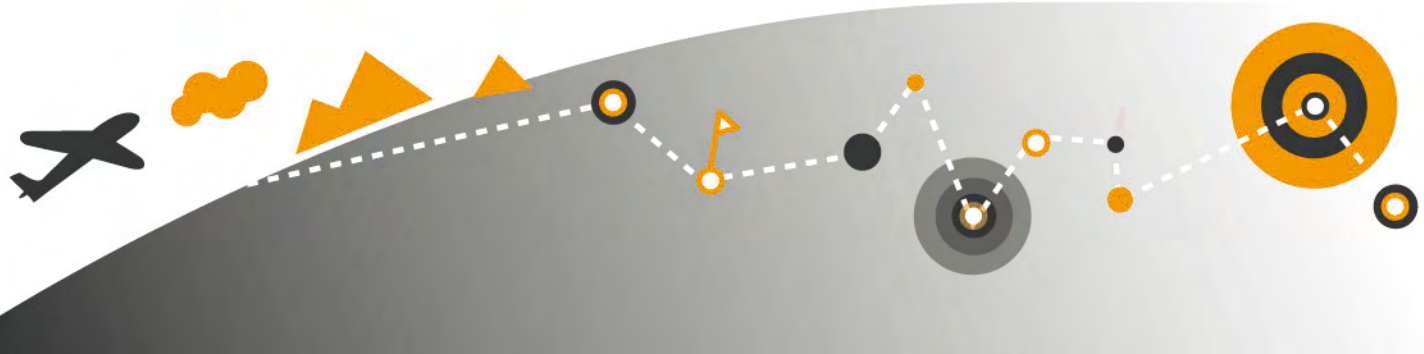
Cyber Passport

Want to be connected to the world?

V@NK runs the website, Cyber Passport, a resource for people seeking information about other countries and their etiquette. Cyber Passport was created to build a global culture of peace by planting a seed of understanding and friendship.

Getting a passport is not sufficient to go to a foreign country. To stay out of trouble and build good relationships with locals, you need to know about the country and its cultural etiquette. Cyber Passport helps you be equipped with the basic knowledge you will need before you actually go somewhere.

Cyber Passport is a collaborative project to be developed with your participation. It will be maintained and improved in the spirit of WIKI, with openness, sharing and active participation. Visit `http://www.cyberpassport.org`, and add or edit an article about your country and the etiquette. Your participation will make Cyber Passport work to realize its vision of a harmonious and peaceful world.



Chapter Five

VANK's activities

In this chapter, you can grasp our activities
to introduce Korean printing methods to the world.
We're sending letters or emails to websites,
textbook publisher and media to introduce Korean printing methods.
VANK, as a non-governmental organization has corrected hundreds
of distorted and mistaken statements
by foreign websites, governments, textbooks and media.
Through these activities, we also found inaccurate information
about Korean printing methods from websites and textbooks.
We cooperated with Korean scholars to change these.
They analyzed inaccurate information and suggest their opinions on it.
Please listen our scholars' voice!

Letter
to textbook publishers

First of all, I'd like to express my respect for publishing such an excellent and valuable textbook.

We, VANK is cyber diplomats whose goal is to raise the national image of Korea throughout the world. We are carrying out a variety of activities to introduce valuable information about Korea to foreigners around the world who don t know about Korea, and show a national image of a Friendly Korea, Friends of the World in the hearts of the people around the world by promoting international exchange with foreigners and Koreans.

I am a member of VANK, and have a great interest in the metal type considered one of the greatest inventions in human history for its capability of mass delivery of information.

I believe that the movable metal type made the Protestant Reformation and Renaissance success in world history and, in the 21st century, even global knowledge network with Internet system as well.

With such interest in the movable metal type, while I researched and examined the column of global printing described in world major textbooks, websites and encyclopedia, I happened to find inaccurate historical record of the movable metal type from the textbook published by your company. Therefore I take this chance to let you know of it and to ask to correct.

On your explanation of world history about type, you introduce the movable metal type of Gutenberg, German and wooden types of China & Japan but the Jikji of Korea that has been confirmed as the first movable metal type in the world.

Jikji, a Buddhist doctrinal book called as Jikjisimcheyojeol or Jikji in short form is the oldest extant book among books printed with movable metal type. It had been made in 1377, 78 years earlier than the Bible in 48 lines made by Gutenberg of German which has been known as the first book printed with movable metal type in about 1455, and has been kept in the National Library of France.

For your reference, I d like to tell you that UNESCO confirmed Jikji as the world oldest movable metal type in September , 2001 and officially registered Jikji as the Memory of the World.

If you visit below websites, you may find the website of UNESCO related to Jikji and systematic evidence showing that Jikji was the first movable metal type in the world

1) Website of UNESCO related to Jikji
http://portal.unesco.org/ci/en/ev.php-URL_ID=3946&URL_DO=DO_TOPIC&URL_SECTION=201.html

2) Website of Cheongju Early Printing Museum related to Jikji
http://www.jikjiworld.net/content/english/jikji/main.jsp

Your publishing company takes a critical roll as a window to deliver the accurate historical fact and truth to the students of the primary and middle schools in the world who have interest in world history.

It ll be our appreciation if you introduce the true story of the Jikji to deliver the accurate historical truth to the people in the world.

We wish to revive the spirit of creation that contributed to all people in the world by development of the world first

movable metal type, the greatest invention of the 14th century in human history, by our voluntary strive in these days. And we wish to make Korea, which has grown as one of the great nations of information and communication in the 21st century, to be recorded one more time as the nation which contributes for all people of the world in world history, and to tell the people of the world of the national image of Korea.

We need your support and cooperation to achieve our dream.

Contact to VANK
Email: jikji@prkorea.org
http://www.prkorea.org

It'll be our appreciation if you introduce the true story of the Jikji to deliver the accurate historical truth to the people in the world.

If you need any information about Korean printing, email us at jikji@prkorea.org

Letters from websites

Letter from didyouknow.com

Dear Park Gi Tae

Thank you for visiting and many thanks for the information. The updates will be made soonest.

Regards
Jimmy
didyouknow

Letter from History for Kids

Dear Sir or Madam,

Thank you for writing. We are working on a section about Korea, which we expect to have available within the next two to three years.

While it is true that the oldest wood block printing from Korea post- dates the earliest *self-dated* wood block printing from China, there are earlier wood block books from China that are dated as early as 700 AD by other means. I have changed the wording of the page to reflect this.

As for the metal type issue, while it is true that Korean printers used metal type before Gutenberg, as far as I know they did not spread their invention outside their own country (or even outside their own imperial court), and the world's use of metal type derives from Gutenberg's independent invention of it.
We're trying to concentrate on developments with global significance.

Karen Carr
Kidipede - History for Kids

Inaccurate information on Korean printing

What websites say	Korean scholars' Analysis
The art of making inked reproductions from woodblocks and movable signs was developed in the 6-8c by the Chinese and Koreans. - High BeamTM Encyclopedia	Woodblock printing technique was developed during the 7-8 century China. Currently extant one is "The Mugujeonggwang daedaranigyeong" which was published in 751 AD Korea. With regard to the movable type printing technique, "Movable Type Printing" was invented by a Chinese, Bi Sheng, in 1041 and the movable metal type printing was invented in the 13th century Korea. The oldest extant metal type printing is 'Baegun Hwasang Chorok Buljo jikji simche yojeol,' abbreviated to 'Jikji,' which was published in 1377 Cheongju, Korea and is currently kept in National Library of France.
The Koreans had been using sand casting to make metal letters and had already been mass-producing books for at least 30 years, but the scholars found no direct evidence that Gutenberg had contact with them. - Nytimes.com	During the Joseon Dynasty, Koreans had mass-produced books by using sand casting. Currently, scholars found no direct evidence that Gutenberg had contact with them.
1) The movable type metal printing press was invented in Korea in 1234 2) The oldest extant movable metal-type book is the Jikji, printed in 1377 in Korea. - Knysna Press	1) The Korean invented movable metal type technique in the early 13th century. 2) The oldest extant metal type printing is 'Baegun Hwasang Chorok Buljo jikji simche yojeol,' abbreviated to 'Jikji,' which was published in 1377 Cheungju, Korea and is currently kept in National Library of France.
Actually, the movable type metal printing press was invented in Korea, as early as, the 13th Century. The oldest surviving book published on such movable metal type belongs to Korea. It was published in 1377. But the invention was not fully utilised by the Koreans or the Chinese. - The Hindu	In fact, the Korean invented movable metal type printing in the early 13th century. The oldest extant metal type printing is "Baegun Hwasang Chorok Buljo jikji simche yojeol," abbreviated to 'Jikji,' which was published in 1377 Cheungju, Korea and is currently kept in National Library of France.
Similar printing had been done earlier in China and Korea. In China printing from movable woodblocks was invented by Bi Sheng in 1040, and printing with movable type made of clay was also prevalent; in Korea movable copper type was invented as early as 1392. - HighBeamTM Encyclopedia	Similar printing technique was tried in China and Korea earlier. In China, Movable Type Printing was tried by Bi Sheng in 1041 and in Korea, movable metal type made in bronze was invented. The oldest extant metal type printing is "Baegun Hwasang Chorok Buljo jikji simche yojeol," abbreviated to 'Jikji,' which was published in 1377 Cheungju, Korea and is currently kept in National Library of France.

What websites say	Korean scholars' Analysis
The printing technology could not industrialize in Korea, because there was not a element of (4)printing press machine. - ICBTT 2002	The Korean invented movable metal type printing in the early 13th century. The oldest extant metal type printing is "Baegun Hwasang Chorok Buljo jikji simche yojeol," abbreviated to 'Jikji,' which was published in 1377 Cheungju, Korea and is currently kept in National Library of France.
1) Not only did Koreans know about printing, but someone about 1200 even invented a phonetic alphabet for Korean - the system we use where each sound is represented by a single letter. Korean scholars rejected the change. They were using the complex Chinese system, considered it more elegant, and mastery of this complex system was the whole basis of their status. 2) Printing in China and Korea was used mostly for authenticating official documents, safeguarding against forgery. The idea of using printing for disseminating information widely either never occurred to anyone, or if it did, was considered undesirable. - Steve Dutch Homepage	1) The Korean not only knew about the movable type printing technique but also contrived a phonetic alphabet, Hangeul in 1443. Using Korean movable metal type, they succeeded in printing diverse documents, such as "Weorin cheon-gang-ji-gok." 2) The Korean invented movable metal type printing in the early 13th century. The oldest extant metal type printing is "Baegun Hwasang Chorok Buljo jikji simche yojeol," abbreviated to 'Jikji,' which was published in 1377 Cheungju, Korea and is currently kept in National Library of France. During Joseon Dynasty, movable metal type printing using wood, bronze and metal had become common, and a various kinds of printings about Agriculture, Medical, Science Technique, and Confucianism were published
11th century The Chinese and Koreans continue to experiment with movable type, using clay, wood, bronze and iron. The complexity of Chinese and Korean symbols creates a major stumbling block to the process. 1440 German Johann Gutenberg invents movable type by developing foundry-cast metal characters and a wooden printing press. - infoplease	
By 1400 Korean printers were casting metal type, but it is Johannes Gutenberg (1398-1468), a German businessman, who is credited with the invention of printing in the West. - Ted's Photographics	The Korean invented movable metal type printing in the early 13th century. The oldest extant metal type printing is "Baegun Hwasang Chorok Buljo jikji simche yojeol," abbreviated to 'Jikj' published in 1377 Cheungju, Korea and is currently kept in National Library of France.
About four hundreds later The Chinese gave the world next invention, it was so called table press. They cut a picture and text into a wooden desk, after it they rubber stamped some paper with it: it is the first important step to the letter ? press. There had been invented metal moving types for press yet in Korea in this time. [···]The first book was printed this technology in 1409. - The Press	

What websites say	Korean Analysis
1043 - [T] Collection of Buddhist Scriptures, the Tripitaka, was printed in Korea using movable metal fonts (Knops 1998). - Dr Ciolek, T. Matthew - Personal Page	Palman daejanggyeong had been printed on the woodblock for 16 years since 1236.

About Gutenberg's invention

What websites say	Korean Analysis
However, Gutenbergs press was wooden, and the most important aspect of his invention was that it was the first form of printing to use movable type. - MFA Talon	The oldest extant metal type printing is 'Baegun Hwasang Chorok Buljo jikji simche yojeol,' abbreviated to 'Jikji,' which was published in 1377 Cheongju, Korea and is currently kept in National Library of France.
1450, Printing press, Johann Gutenberg German - MSN Encarta	Jikji is the oldest extant movable metal type printing
The Bible, which is known as the Gutenberg Bible, was published around 1455, in an edition of about 180 copies. It is the oldest surviving printed book. - Nytimes.com	The oldest extant metal type printing is "Baegun Hwasang Chorok Buljo jikji simche yojeol," abbreviated to 'Jikji,' which was published in 1377 Cheongju, Korea and is currently kept in National Library of France.
Although he[Gutenberg] was not the first to try casting metal type, the Chinese had tried it and found it too difficult to do properly. He created the first system for casting type so that the letters could form a flat surface, essential to their use in printing. - History of Science and Technology	The Korean invented movable metal type printing in the early 13th century. The oldest extant metal type printing is "Baegun Hwasang Chorok Buljo jikji simche yojeol," abbreviated to 'Jikji,' which was published in 1377 Cheongju, Korea and is currently kept in National Library of France.
The first substantial work printed from moveable metal type, the so-called Gutenberg or 42-line Bible, produced in Mainz around 1455 by Johann Gutenberg, Johann Fust and Peter Schoeffer. - Cambridge University Library	

About Chinese printing methods

What websites say	Korean Analysis
A copy of the Diamond Sutra, found sealed in a cave in China in the early 20th century, is the oldest known dated, printed book, with a printed date of 868. - Wikipedia	
[. . .] The Diamond Sutra, [. . .] the oldest extant printed book, shows an advanced technique behind which there must have been a long evolution. - Communication Arts	
Somebody in Tang Dynasty China, about 850 AD, had the idea of carving wooden blocks with a page of text, then inking it and pressing paper on the block to print a page. The oldest printed scroll we know of comes from northwest China, and it says on it that it was printed in 868 AD. - Kidipedea History for Kids	The oldest printing is "Mugu jeonggwang dae darani-gyeong." This printing was printed on the woodblock in 751 AD Korea.
While there are no surviving examples of the Chinese printing presses of the 11th Century, the oldest surving printed book on record is the Buddhist Diamond-Sutra of 868 AD. - Did you know?	
600 Ink on seals is stamped on paper in China, (true printing) 868 Books printed in China - A Brief History of Communication	751, printed "Mugu jeonggwang dae darani-gyeong"
The earliest dated printed book, known as the Diamond Sutra, was produced in China in 868 CE, but it is believed that the practice dates back well before this date. The Japanese and the Chinese regularly used wood blocks carved in relief to produce Buddhist charms as early as the fifth century CE. - The Electronic Labyrinth	The oldest printing is "Mugu jeonggwang dae darani-gyeong." This printing was found in Bulguksa Seokgatap of Gyeongju, Korea
In the middle 1200's, type characters cast from metal (bronze) had been developed in Japan and China. The oldest known text printed from this type of metal type dates to the year 1397 AD. - Dynodan Printing Solutions	In the early 1200, Korea invented type characters cast from metal (bronze). The oldest extant metal type printing is "Baegun Hwasang Chorok Buljo jikji simche yojeol," abbreviated to 'Jikji,' which was published in 1377 Cheongju, Korea and is currently kept in National Library of France.

About Japanese printing methods

What websites say	Korean Analysis
The Japanese produced wood-block rubbings of Buddhist charms that were the first authenticated prints. - MFA Talon	The Japanese printed Hyakumanto Daranigyeong in 770 AD; Korea's "Mugu jeonggwang dae darani-gyeong" was printed on the woodblock even before 751 AD.
770 Oldest surving printing: a Buddhist prayer for Japanese Empress Shotoku. - Education Technology Historical Events	The Korean invented movable metal type printing in the early 13th century. The oldest extant metal type printing is "Baegun Hwasang Chorok Buljo jikji simche yojeol," abbreviated to 'Jikji,' which was published in 1377 Cheongju, Korea and is currently kept in National Library of France. 'Gyemija' was printed in 1403 Joseon Dynasty

Inaccurate information on Korean Printing of American textbooks

What American textbooks say	Korean Analysis
During the Koryo period in 1234, the Koreans invented movable metal type using Chinese symbols to print books. - Global Studies : Civilizations of the Past and present	During the Koryo period in the early 13C, the Koreans invented movable metal type using Chinese symbols to print books.
Temples flourished, and religious writings multiplied. The royal family had printers carve more than 81,000 wooden blocks containing the entire Buddhist scripture. The blocks can still be seen in a Buddhist temple today. The Koreans later improved printing by developing movable metal type. - World cultures, A global mosaic	Temples flourished, and religious writings multiplied. Though, Koreans invented movable metal type printing in the early 13th century, the royal family had printers carve more than 81,000 wooden blocks containing the entire Buddhist scripture. The blocks can still be seen in a Buddhist temple today.

What websites say	Korean Analysis
Some scholars speculate that block printing was invented in the Koryo state and then passed on to the Chinese. - How to prepare for the AP, world history 2007, 2nd edition	Woodblock printing technique was developed in the 7-8 century China. Currently extant one is "The Mugujeonggwang daedaranigyeong" which was published in 751 AD Korea.
1) During the 1405 the emperor Sejong ordered the development of a Korean alphabet. The Koreans borrowed the Chinese invention of movable wood type and then improved upon it. They designed movable type blocks made of metal, which was far more durable and produced sharper images. 2) Koreans learned to use movable type from the Chinese. They advanced this technology by casting type blocks in metal. - World history : The human journey	1) Woodblock printing technique was developed in the 7-8 century China. Currently extant one is "The Mugujeonggwang daedaranigyeong" which was published in 751 AD Korea. With regard to the movable type printing technique, "Movable Type Printing" was invented by a Chinese, Bi Sheng, in 1041 and the movable metal type printing was invented in the 13th century Korea. The oldest extant metal type printing is "Baegun Hwasang Chorok Buljo jikji simche yojeol," abbreviated to 'Jikji,' which was published in 1377 Cheongju, Korea and is currently kept in National Library of France. During the 1443 the emperor Sejong ordered the development of a Korean alphabet. 2) Koreans learned to use movable type from the Chinese. They advanced this technology by casting type blocks in metal.
314P - Koreans used woodblock printing from China to produce a flood of Buddhist texts. Later, Korean inventors made movable metal type to print large numbers of books. Koreans improved on other Chinese inventions. - World history : connections to today, Volume one	Woodblock printing technique was developed in the 7-8 century China. Currently extant one is "The Mugujeonggwang daedaranigyeong" which was published in 751 AD Korea. With regard to the movable type printing technique, "Movable Type Printing" was invented by a Chinese, Bi Sheng, in 1041 and the movable metal type printing was invented in the 13th century Korea. The oldest extant metal type printing is "Baegun Hwasang Chorok Buljo jikji simche yojeol," abbreviated to 'Jikji,' which was published in 1377 Cheongju, Korea and is currently kept in National Library of France.
The earliest surviving history of Korea was compiled in 1145. Printing using moveable metallic type was invented during the thirteenth century. - The heritage of world civilizations, combined volume, seventh edition	The Korean invented movable metal type printing in the early 13th century. The oldest extant metal type printing is "Baegun Hwasang Chorok Buljo jikji simche yojeol," abbreviated to 'Jikji,' which was published in 1377 Cheongju, Korea and is currently kept in National Library of France.
Koryu Culture - Korean artisans produced one of the great treasures of the Buddhist world- many thousands of large wooden blocks for printing all the Buddhist scriptures. This set of blocks was destroyed by the Mongols, but the disaster sparked a national effort to re create them. The more than 80,000 blocks in the new set remain in Korea today. - World history : Patterns of interaction	Goryeo Culture - Korean artisans produced one of the great treasures of the Buddhist world- many thousands of large wooden blocks for printing all the Buddhist scriptures. This set of blocks was destroyed by the Mongols, but the disaster sparked a national effort to re create them. The more than 80,000 blocks in the new set remain in Korea today. The Korean invented movable metal type printing in the early 13th century. The oldest extant metal type printing is "Baegun Hwasang Chorok Buljo jikji simche yojeol," abbreviated to 'Jikji,' which was published in 1377 Cheongju, Korea and is currently kept in National Library of France.

About VANK

The Voluntary Agency Network of Korea is a non-governmental organization operating the official internet site for its campaigns. Its members play the roles of cyber tour guides and goodwill ambassadors for Korea to give people around the world better information about Korea by e-mail.

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About
the Cheongju Early Printing Museum

Cheongju Early Printing Museum opened since March 17, 2002 at Heungdeoksa Temple site where the oldest metal type printing, Jikji was published. This museum specializes in early printings and advertises that Korean ancestors invented and developed metal printing types.

And it is used for educational purposes like delivering ancestors great achievement and studying the Korean history of printing culture development.

And I promise the Early Printing Museum of Cheongju will establish the status of our ancestors printing culture in the world and play an important role by data banking Jikji for human public interest, holding workshops on international registered legacy, and researching with the world-famous printing museums in Germany and China, etc.

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From woodblock to the internet

How much do you know about printing methods?
You may barely know about this
and only heard your country's representative old books.
In this chapter, you can grasp the development of world's printing methods.
By reading this chapter,
you may widen your knowledge and view about printing.

Jikji in the World

JIKJI inscribed on Memory of the World Register,
UNESCO with Gutenberg's 42-line Bible on the same day.
By this inscription, this book is not only Korean's heritage but the world's heritage.
Eventually, the world recognized the value of this book.
In this chapter, we tell you the influence to civilization of this book
and the value as world heritage.
And the world leader and scholars tell you great value of movable metal type.

Old books of the world

There are valuable old books in each country which reflect their culture,
life style and society.

If you look into these books, you may learn their ancestors' wisdom.
In this chapter, our international members contributed their articles to
introduce their nations' valuable old books and the development
of printing methods.

VANK's activities

You can grasp our activities to introduce Korean printing methods to the world.
We're sending letters or emails to websites,
textbook publisher and media to introduce Korean printing methods.
VANK, as a non-governmental organization has corrected hundreds
of distorted and mistaken statements
by foreign websites, governments, textbooks and media.
Through these activities, we also found inaccurate information
about Korean printing methods from websites and textbooks.
We cooperated with Korean scholars to change these.
They analyzed inaccurate information and suggest their opinions on it.
Please listen our scholars' voice!

The Voluntary
Agency Network of Korea
www.prkorea.org