



# Digitizing Chinese Rare Books and Manuscripts at the Bavarian State Library

CCDSCR 2016



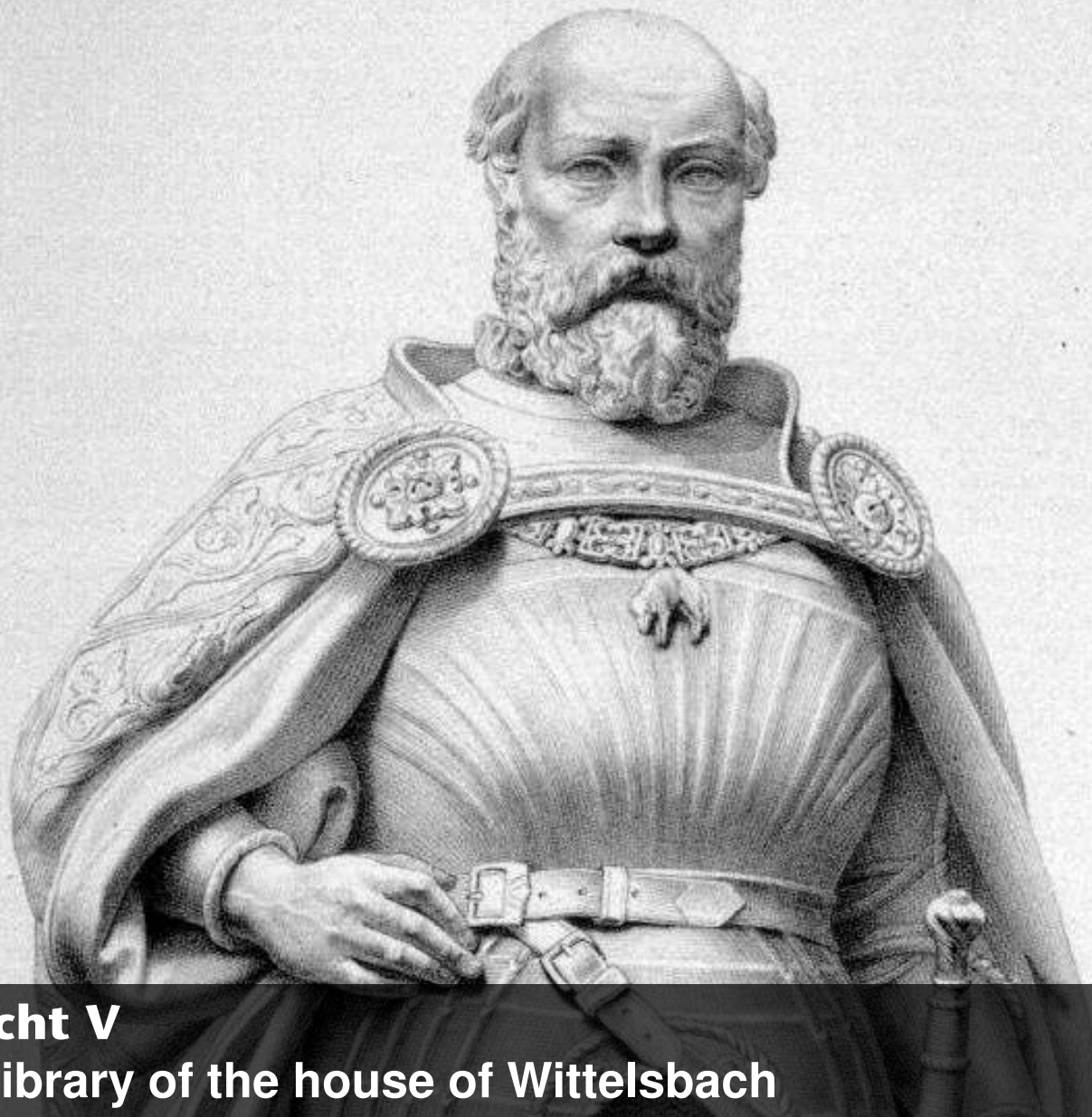
# Bavarian State Library

European universal library and international research library

- 10 million volumes
- 63,000 current periodicals
- 1.1 million E-Books
- 97,000 manuscripts
- 20,000 incunabula







**Duke Albrecht V**  
**1558: court library of the house of Wittelsbach**

# Chinese Collection – 17th/18th century

- Bavarian rulers: support of Jesuit missionaries
- Chinese books came into the possession of the Bavarian court as gifts from missionaries
- Earliest Chinese book list dating 1618





# Chinese Collection – 19th/20th century:

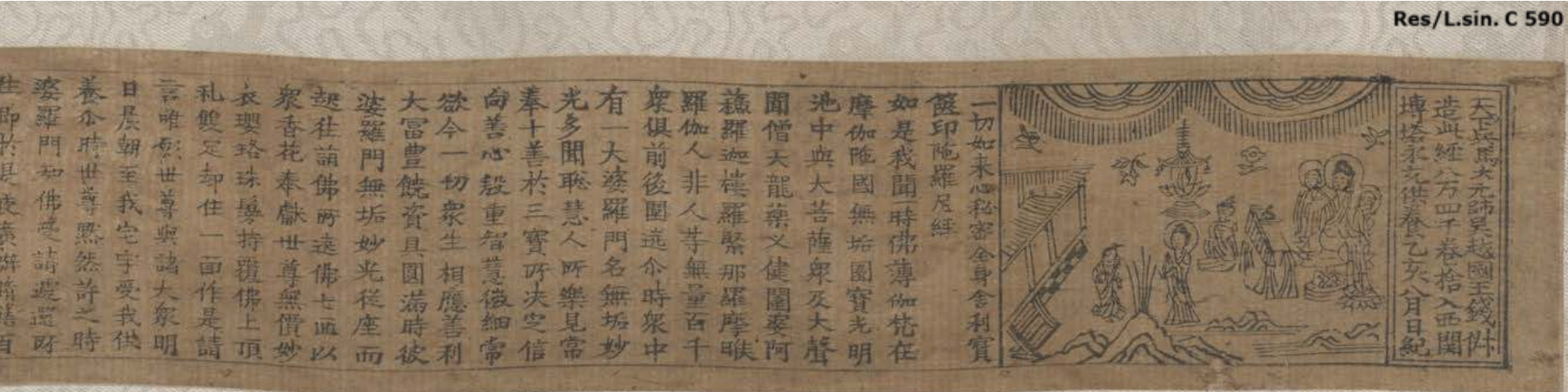
- **Karl Friedrich Neumann**, Guangzhou 1830/31: 3,500 vol.
- **Onorato Martucci**'s collection, purchased in 1851: 2,700 vol.
- **Etienne Quatremère**'s library, purchased in 1858: 2,000 Chinese and Manchurian works
- **Georg Reismüller**, purchasing journey in 1929: 18,500 vol.



# Chinese Collection – Today

- 230,000 volumes and 3,000 manuscripts
- Current acquisitions focus on the arts disciplines of pre-modern China
- Holdings supplemented by literature on China in non-Chinese languages

Res/L.sin. C 590



# Digitization

## Full text digitization of Chinese books and manuscripts (2011-2015)

- financial support by German Research Foundation (DFG)
- 12.000 volumes 册 dating from the 17th century and earlier re-catalogued and fully digitized
- 1.1 million digital images





# Digitization

## Including:

- approx. 20 Song and Yuan dynasty printings
- more than 100 Ming dynasty printings
- several thousand printed volumes from the Qing dynasty
- printings of Western missionaries in China
- 90 scrolls and sutra bindings (incl. 3 scrolls from Dunhuang)



# Digitization

## First step: **Restoration**

**Institute of Book and  
Manuscript  
Conservation (IBR)**  
of the Bavarian State  
Library



# Digitization

Second step:

## Digitization

Munich Digitization Center

- Scan process
- Quality control of every single image
- Capturing of structural metadata (table of contents)





# Digitization

**Use of various digitization techniques, depending on size and material**









All title information

Table of contents

Display volumes

- feng mian (封面) | qin 'lan zhai' 'hua sheng fa dui' yin (鈐蘭齋'華生發兌'印)
- xu (序) | qian 'long xi you lan shi shen ding shu hua' yin (鈐'隴西友蘭氏審定書畫'印)
- lei shu yin zhi (類書彙旨)
- zong mu (總目)
- zheng yue shu mu (徵閱書目)
- xuan xiang bu, juan 1 zhi juan 3 (玄象部, 卷一至卷三)
- sui shi bu, juan 4 zhi juan 5 (歲時部, 卷四至卷五)
- qu yu bu, juan 6 zhi juan 16 (區宇部, 卷六至卷十六)
  - ci chu que 11 ye (此處缺十一葉)



# 潛確類書

陳明卿太史纂輯

本衙藏版



# Long-term preservation

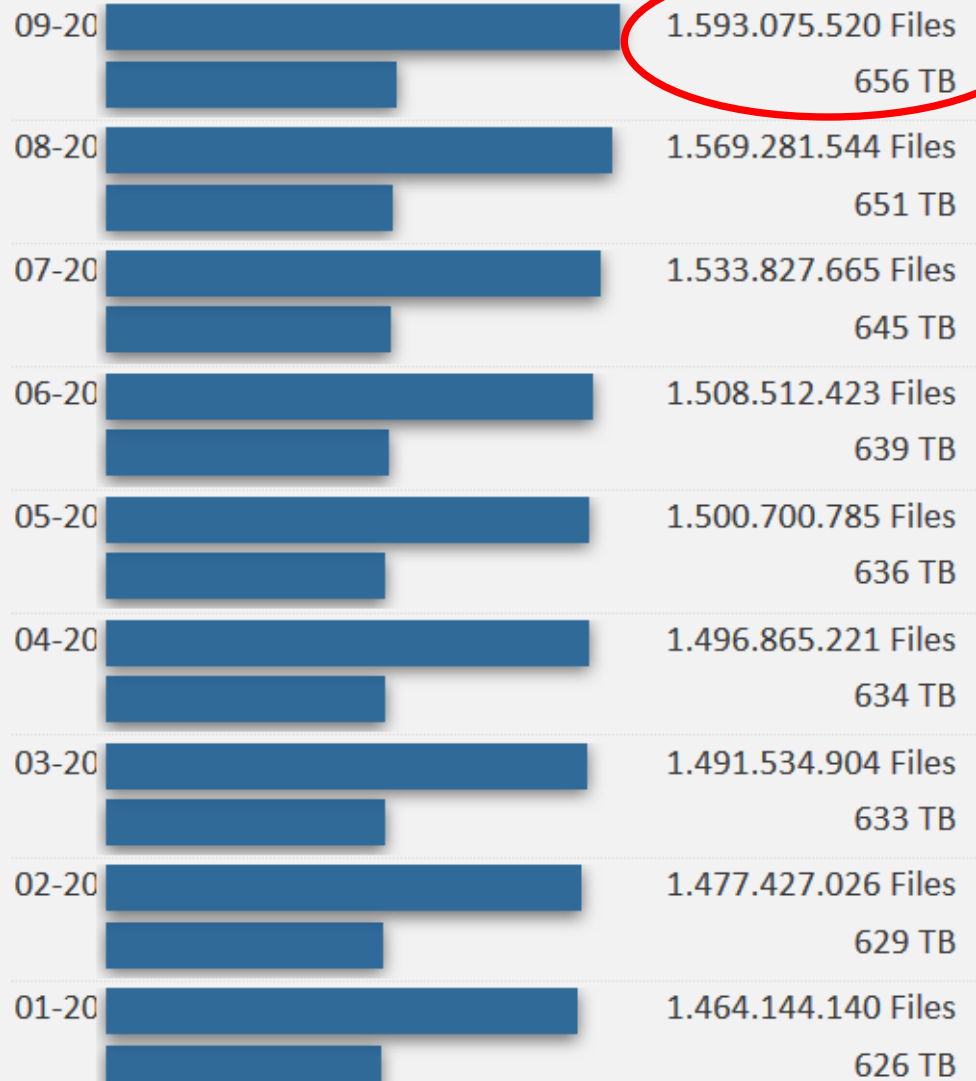
- **Cooperation with the Leibniz Computing Center (LRZ, Munich): organisational and technical infrastructure for long-term archiving since 2004**
- **Digital archiving software „Rosetta Digital Preservation System“ from ExLibris**
- **Efficient and largely automated ingest and archiving of data as well as access to the data**



# Long-term preservation

**Large electronic archive:  
656 terabytes of data,  
more than 1.5 billion files  
(September 2016)**

**2016**





# Webaccess

## Webaccess through:

- Digital Collections and Online Catalogue of the Bavarian State Library
- WorldCat
- Union Catalog of Chinese Rare Books (National Central Library, Taiwan)
- Virtual libraries
- Search engines (Google etc.)

# Digital East Asia Collections

<http://eastasia.digital-collections.de>



## 歡迎進入巴伐利亞國家圖書館東亞數字資源庫！

這裏，您可以欣賞到圖書館收藏的中文、日文和韓文等多種文字的古籍資料，收錄的典藏從七世紀一直跨越至十九世紀。您可以選擇以下兩種檢索方式，即任意詞檢索和高級檢索（見檢索幫助）。  
[[點擊相關信息](#)]

巴伐利亞國家圖書館中文古文獻數字化項目自2011年起由德意志研究聯合會（DFG）鼎力相助。

目前，您可以瀏覽到90萬張圖片，未來，該數據還將持續增長。

[[點擊相關信息](#)]

三才圖會 上海 中國 丹桂堂 九章算術  
雜草圖說 五桂堂 五經四書 五經類編 京都 北  
京 張名垣魯文 任福祐 俞安期 修德堂 倫敦  
教會 靈山書院 雲山書院 元文齋 光裕堂  
內府 凌稚隆 初學記 前漢書 劉綽 劉昭  
北京 北史 北齊書 十六國春秋 半壁堂  
南史 厚德堂 古今說海 史記 史記評林 司馬  
遷 名數書譜 名畫譜 吳勉學 吳榮光 周易兼  
義 味古山房 唐類函 商周祚 商瑤 嚴如煜 大  
方便佛報恩經 大方廣佛華嚴經 大日本史 大  
明一統志 大般若波羅蜜多經 太上太玄女  
青三元品誠拔罪妙經 妙法蓮華經 妙術博  
物箋 姚思廉 姚崇 孔穎達 孔穎達 安藤広重  
安藤広重 宋書 宋濂 宏 富大用 小田切春江  
尚友錄 屠善孫 山堂肆考 山東 山東京伝  
山海經 岡田玉山 崔鴻 嶺南逸史 師古齋 吳  
勉學師古齋 常熟 平田篤胤 康熙字  
典彙要 廖用賢 廣州 廣文堂 廣東 龔山  
堂別集 張世賢 張幼學 張潮 張瑞圖 張翰林校  
正禮記大全 彭大翼 後漢書 徐堅 徐宏祖 徐霞  
客遊記 徐顯卿 御制詩經圖 性理大全書 蘇  
廣二略 顧學 李太

# Digital East Asia Collections

<http://eastasia.digital-collections.de>

- Website in German, English, Chinese
- Two search modes:  
systematic search and simple search
- Simple search scans both bibliographical data as well as tables of content
- Use of zoom technology





[Home](#)[Search](#)[Collections](#)[Help](#)[Contact](#)[Imprint](#)

Date of publication

Year of

Title

Author / Person

+ 11 ...

+ 13 ...

+ 14 ...

+ 15 ...

+ 16 ...

+ 17 ...

+ 18 ...

**Period of publication**



## Year of Publication

- 11 ...
- 13 ...
- 14 ...
- 15 ...
  - 1522
  - 1523
  - 1524
  - 1532
  - 1533
  - 1544
  - 1551
  - 1566
  - 1567
  - 1573
  - 1577
  - 1586
  - 1590
  - 1596
  - 1597
  - 1598
- 16 ...
- 17 ...
- 18 ...

## Period of publication | 15 | 1524

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### Wen xian tong kao (文獻通考) ; 1

Ma, Duanlin <ca. 1254 - ca. 1323> (馬端臨) - Ying xu zhai (映旭齋) - Vonwort 1524 (嘉靖三年序, [晚明刊本])

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Ma, Duanlin <ca. 1254 - ca. 1323> (馬端臨) - Ying xu zhai (映旭齋) - Vonwort 1524 (嘉靖三年序, [晚明刊本])

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Ma, Duanlin <ca. 1254 - ca. 1323> (馬端臨) - Ying xu zhai (映旭齋) - Vonwort 1524 (嘉靖三年序, [晚明刊本])

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### Wen xian tong kao (文獻通考) ; 4

Ma, Duanlin <ca. 1254 - ca. 1323> (馬端臨) - Ying xu zhai (映旭齋) - Vonwort 1524 (嘉靖三年序, [晚明刊本])

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### Wen xian tong kao (文獻通考) ; 5

Ma, Duanlin <ca. 1254 - ca. 1323> (馬端臨) - Ying xu zhai (映旭齋) - Vonwort 1524 (嘉靖三年序, [晚明刊本])

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Back to results *tang lei han* 📖

Tang lei han : 200 juan, mu lu : 2 juan ; 1  
Author / Person: Yu, Anqi ca. 1551-ca.1618  
Place of Publication: [s.l.] | Year of Publication: 1603 Platten 1603; Abzug 1618  
Call number: 4 Lsin. A 15-1/10  
URN: urn:nbn:de:bvb:12-bsb00065741-1

[\[Zend-Viewer\]](#) [\[DFG-Viewer\]](#) [\[PDF-Download\]](#)

All title information	Table of contents	Display volumes
Author / Person	Yu, Anqi <ca. 1551-ca.1618> (俞安期); Xu, Xiangqing <js 1568> (徐顯卿)	
Title	Tang lei han : 200 juan, mu lu : 2 juan ; 1 (唐類函 : 二百卷, 目錄 : 二卷 ; 1)	
Place of publication	[s.l.]	
Time of publication	Platten 1603; Abzug 1618	
Extent	1. han 10 ce	
Description	Blockdruck (刻本). - 框20,6×14,8公分, 10行20字, 白口, 四周單邊, 單魚尾, 版心上鑄部目, 中鑄卷次, 下鑄類目小題及偶鑄刻工, 及鑄字號. - 封面題“唐類函蘭居重訂, 養正堂藏版”. - 卷端署“明東學俞安期彙纂, 明同鄉徐顯卿校訂”. - 前有明萬曆癸卯年[1603]“刻唐類函序”, 萬曆戊午年[1618]“程開祜”序辭)	

Zoom: -0.05 1.0 +0.05 | Rotate: -90° 0° +90° | pages: 1 2 250 ⏪ -1 Scan 2 +1 ⏩







Back to results *tang lei han* 📖

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URN: urn:nbn:de:bvb:12-bsb00065741-1

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All title information **Table of contents** Display volumes

- feng mian (封面) | qian fei zhai' tian lu ge tu shu yin (鈐表  
章'天祿閣圖書'印)
- xu (序)
- fan li (凡例)
- mu lu (目錄)
- tian bu, juan 1 zhi juan 2 (天部, 卷一至卷二)
  - juan 3 zhi juan 5 (卷三至卷五)
- sui shi bu, juan 6 zhi juan 7 (歲時部, 卷六至卷七)
  - juan 8 zhi juan 11 (卷八至卷十一)
- di bu, juan 12 zhi juan 13 (地部, 卷十二至卷十三)
  - juan 14 zhi juan 16 (卷十四至十六)
  - juan 17 zhi juan 20 (卷十七至卷二十)
- di wang bu, juan 21 zhi juan 24 (帝王部, 卷二十一至卷二十四)

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Tang lei han (唐類函); 1  
Yu, Anqi <ca. 1551-ca.1618> (俞安期); Xu, Xianqing  
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Tang lei han (唐類函); 2  
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<js 1568> (徐顯卿) - Platten 1603; Abzug 1618

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Tang lei han (唐類函); 3  
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<js 1568> (徐顯卿) - Platten 1603; Abzug 1618

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<js 1568> (徐顯卿) - Platten 1603; Abzug 1618

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Tang lei han (唐類函); 5  
Yu, Anqi <ca. 1551-ca.1618> (俞安期); Xu, Xianqing  
<js 1568> (徐顯卿) - Platten 1603; Abzug 1618

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Yu, Anqi <ca. 1551-ca.1618> (俞安期); Xu, Xianqing  
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Tang lei han (唐類函) ; 2

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Yu, Anqi <ca. 1551-ca.1618> (俞安期); Xu, Xianqing  
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<js 1568> (徐顯卿) - Platten 1603; Abzug 1618

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Da fang bian fo bao en jing  
Place of Publication: [Xiezhou] | Year of Publication: 1149  
[1149-1173] | Publisher: Tianning si  
Call number: Res/4 L.sin. C 266  
URN: urn:nbn:de:bsb:12-bsb00065148-8

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[All title information](#) [Table of contents](#) [Display volumes](#)

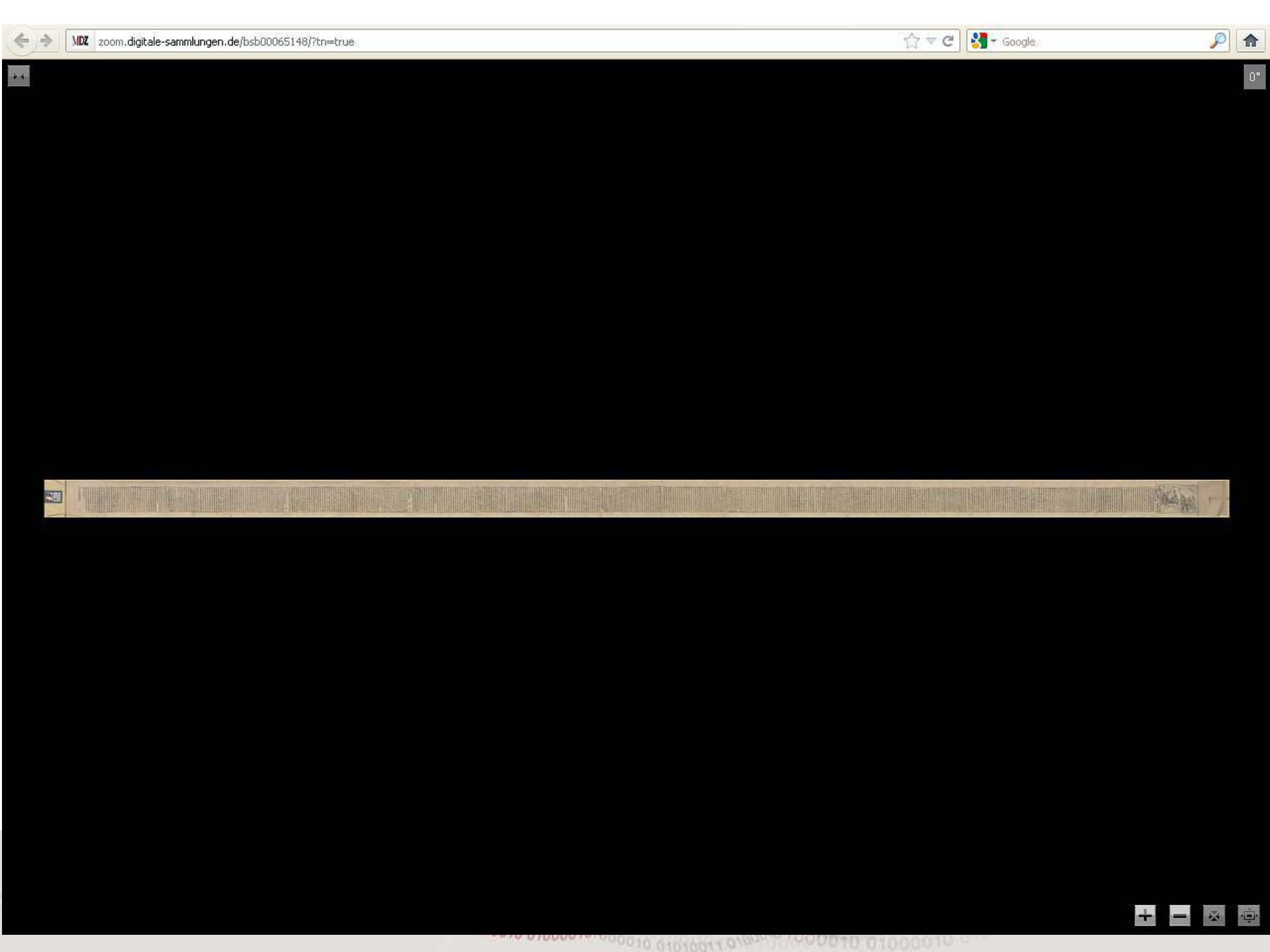
Title	Da fang bian fo bao en jing (大方便佛報恩經)
Place of publication	[Xiezhou] (解州)
Publisher	Tianning si (天寧寺)
Time of publication	[1149-1173]
Extent	1 Rolle
Description	Blockdruck (刻卷). · 有扉畫 · 紙張框高31,8 ; 寬105,5公分 · 經文框高21,3 ; 21,5公分 · 扉畫框高25,9 ; 寬38,1公分 · 票框高31, 寬 26,2公分 · 28張, 每張寬 55,8 ; 57公分 · 每張28行 16, 17字不等 · 扉畫前鋪“趙城廣福院寺” · 扉畫後第一張卷端鋪“大方便佛報恩經對治品第三, 卷第二, 後漢朱 譯復” · 每張端鋪“大方便佛報恩經, 卷第二, 第一 ..... 二十八張, 復字號” · 經文末鈐“宝佛齋印”

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Zoom: -0.05 1.0 +0.05 | Rotate: -90° 0° +90° | pages: 1 2 250 ⏪ -1 Scan 1 +1 ⏩ [Zoom-Viewer]







大方廣佛報恩經對治品第三  
卷第三  
今時世尊處在大眾猶如日輪光明赫奕隨  
教眾星前如大龍蟠蘭椿輪精練聚爛觀  
之眼眩思之意亂威光是曜色無等喻猶蒙  
火光日出不現日月雖有百千光明方於帝  
釋譬如聚墨帝釋雖有身淨妙光方大梵  
王所有光明猶如瓦礫方於夜光摩尼寶珠  
大梵天王雖有淨妙百千光明方於如來所  
有光明亦如聚墨何以故如來圓光七尺乃  
能遠照十方世界其中眾生過斯光者皆得  
得現像者得中拘雙象生即得手足那迷衆  
生得親真言以要言之諸不稱意皆得如願  
今時會中有七十六菩薩摩訶薩即從座起  
頭面禮佛遶百千匝却住一面異口同音說百  
千偈讚歎如來其名曰不思議菩薩離覺  
音菩薩惟念安菩薩離垢稱菩薩無量音  
菩薩大名聞菩薩明寶覺菩薩堅師子菩薩  
闍維菩薩摩訶薩舍所念菩薩及智讀菩薩意



趙城縣廣勝寺





# Digital East Asia Collections

<http://eastasia.digital-collections.de>

- **All digitised images are freely accessible online**  
Images available as JPGs with 72 dpi. Free PDF download is possible. TIFs (300 dpi) can be provided e.g. for reproductions.
- Relaunch in 2017, using IIF technology (International Image Interoperability Framework)
- **The website also contains digitized versions of Chinese and Japanese printings from the 18th and 19th century, created in cooperation with Google.**

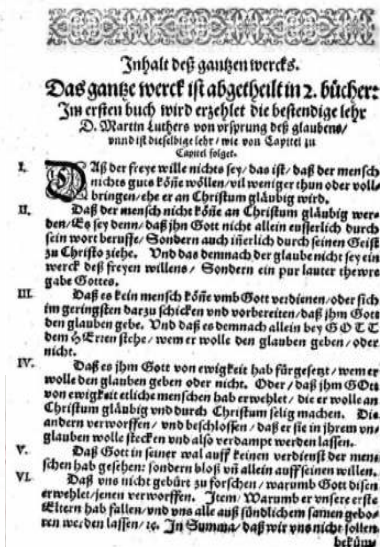




# Public-Private-Partnership with Google

- Since 2007: more than 1 million copy-right free volumes (dating from the 17th to the 19th centuries) digitized by Google
- Among these: several thousand Chinese volumes and a significant number of Western titles on East Asia

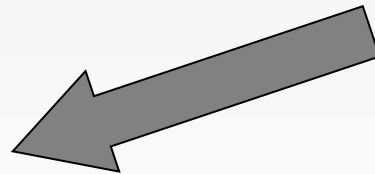
**BSB** Bayerische  
StaatsBibliothek



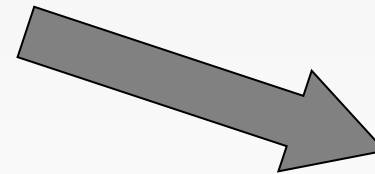
**BSB** Bayerische  
StaatsBibliothek  
Information in erster Linie



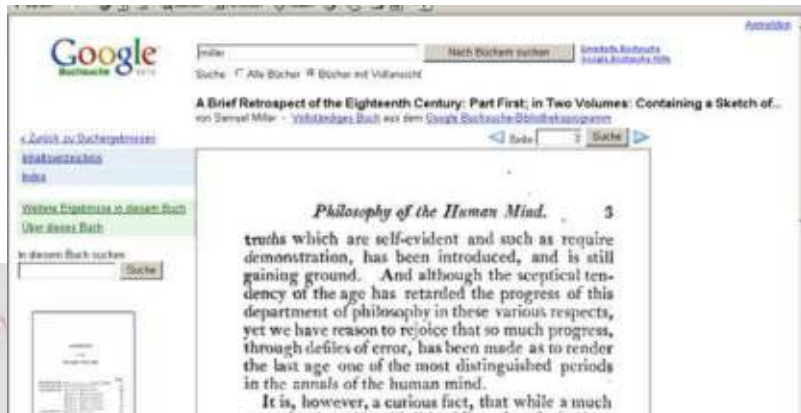
# Digitization by Google



Google Digital Copy



Library Digital Copy



# Digitization at the Bavarian State Library

## Two pillars:

- **Inhouse digitization (Munich Digitization Center):**  
manuscripts, incunabula, printings of the 16th century, all other old and valuable items
- **Public-Private-Partnership with Google:**  
copy-right-free printings of the 17th, 18th and 19th century



# Current figures (September 2016)

## 1.2 million digitized volumes:

- **1 million digitized by Google**  
(among these ca. **15,000 Chinese volumes** dating from the 17th to the 19th century)
- **200.000 digitized by the Munich Digitisation Center**  
(among these ca. **12,000 Chinese volumes** dating from the 17th century and earlier)





Today:

The **majority** of out-of-copyright **Chinese titles** (works published before 1875) of the Bavarian State Library are **fully digitized and freely accessible online.**



## **Challenges:**

- improvement of visibility**
- integration into established and widely used search environments**
- ensuring long-term preservation**

# Thank you!

[tabery@bsb-muenchen.de](mailto:tabery@bsb-muenchen.de)

