

# Newspaper Digitization in Germany – Results and Perspectives of the German Research Foundation Pilot Scheme 2013-2015

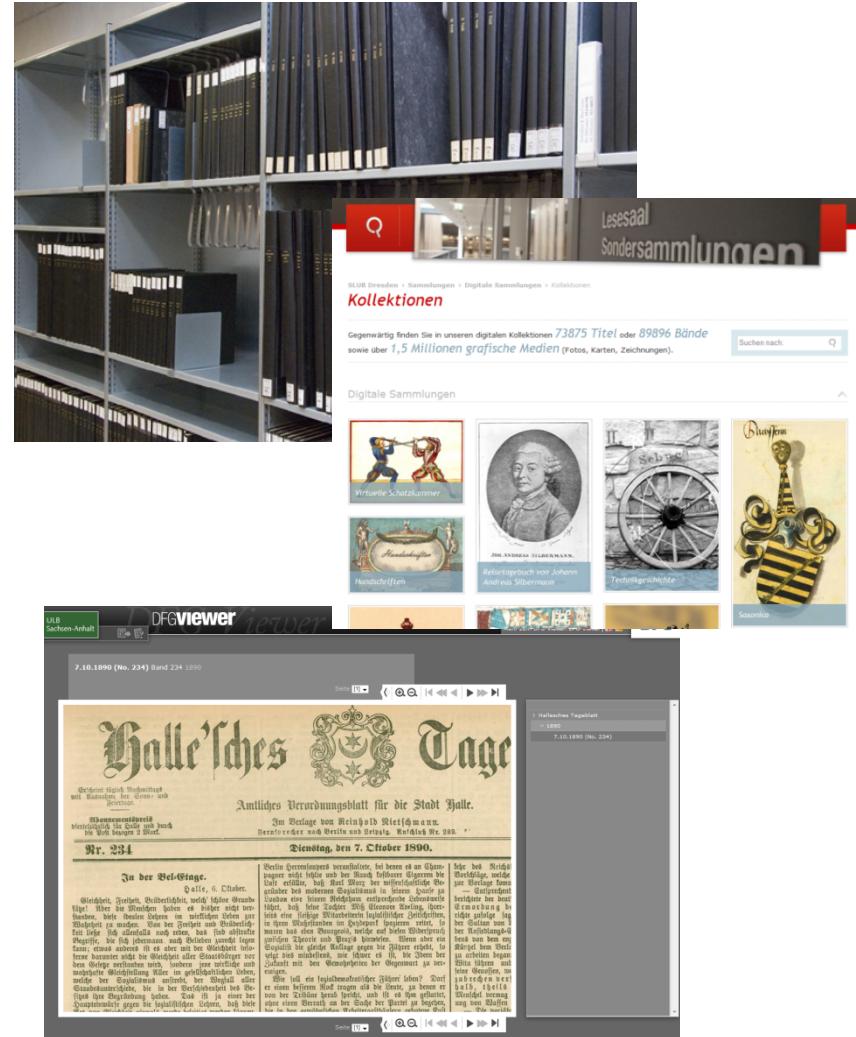
***Reviving the past and keeping up with the future – the libraries' role in preserving and providing access to newspapers and news media***

April 20-22, 2016, IFLA Hamburg

# Digitizing Historical Newspapers in Germany

## Agenda

1. The situation of historical newspapers in Germany
2. The participants of our particular project
3. What we did
4. Our recommendations

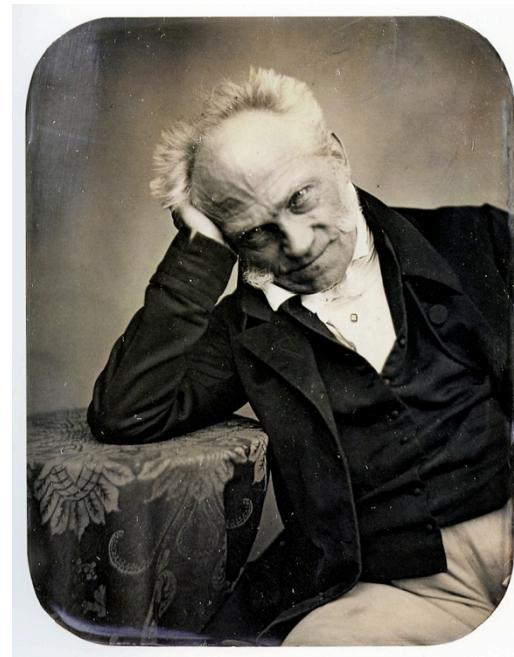


# Situation of historical newspapers in Germany

*„Newspapers are the second hand of history.“*

*This second hand, however, is usually not only of other material to the other hands, it also seldom works properly.“*

*Arthur Schopenhauer*



# Situation of historical newspapers in Germany

- in Germany there are more than 16,000 newspapers
- most of them cased or on microfilm
- access at the library



# International Benchmarks

## British Newspaper Archive

**The British  
NEWSPAPER  
Archive**  
One place, *millions* of stories

Explore over 200 years of history  
Millions of stories: from your street to the world

Dresden SEARCH ▶

Show search tips > Advanced search >

**Browse by newspaper title**

Choose a title ▼

**8,757,049** pages: see latest additions

**267** titles online

**Browse by date range**

Decade	Pages (approx.)
1710-1759	100
1760-1809	100
1810-1859	150
1860-1909	350
1910-1959	150

**Browse by place of publication**

Choose a county ▼

RT @FieldMeasurer: 26 Sept 1914: Manchester Scottish Battalion parade before leaving for training in Edinburgh. <http://t.co/Kg26mz8QNt> <http://ppic.twitter.com/pnfbL5uFme>

# International Benchmarks National Digital Newspaper Program



ASK A LIBRARIAN

DIGITAL COLLECTIONS

LIBRARY CATALOGS

Search

Search Loc.gov

GO

[The Library of Congress > National Digital Newspaper Program](#)

## NATIONAL DIGITAL NEWSPAPER PROGRAM

 Search this site

GO

- ➊ [NDNP Home](#)
- ➋ [About the Program](#)
- ➋ [Guidelines & Resources](#)
- ➋ [Award Recipients](#)
- ➋ [Program News](#)
- ➋ [NDNP Extras](#)
- ➋ [Contact the NDNP](#)

## Chronicling America

Search newspaper pages from 1836-1922 digitized through the NDNP or find information about American newspapers published between 1690-present.

- [Go to Chronicling America](#)
- [Topics in Chronicling America](#)

## National Digital Newspaper Program

A partnership between the Library & the National Endowment for the Humanities



### About the NDNP



The National Digital Newspaper Program (NDNP), a partnership between the National Endowment for the Humanities and the Library of Congress (LC), is an Internet-based, searchable database providing descriptive information and selected full-text articles from approximately 300 U.S. newspapers.

Supported by NEH, this rich digital resource will be maintained at the Library of Congress. An NEH award will contribute to the development of the NDNP, eventually, all U.S. state and territorial newspapers will be included.

[Learn more about the Library's role in the NDNP »](#)



California Digital Newspaper Collection > Los Angeles Herald > April 1909

# International Benchmarks

## Australia

**Trove** Digitised newspapers and more

Home About Browse Help Sign up Login

Trove: Home About Site news Statistics Tags Help Forum Contact us

### Find an article

Search articles Advanced Search

### Find an issue

by Title

1. The Sydney Morning Herald
2. The Argus
3. Northern Territory Times and Gazette
4. Brisbane Courier
5. The Australian Women's Weekly

Show all titles

by State

1803 JAN FEB MAR APR  
MAY JUN JUL AUG  
SEP OCT NOV DEC  
S M T W T F S

**On this day**  
THE NEWCASTLE SUN (NSW : 1918 - 1954), TUESDAY 2 OCTOBER 1945

**Navigation tips for the example newspaper page below:**

- Scroll with the scrollbars or your scrollwheel.
- Pan by clicking and dragging the image.
- Zoom with the zoom controls in the bottom right.

Read this article

# WEDDINGS

**AT CHURCH OF CHRIST:** The marriage of Barbara Joan, daughter of W/O. and Mrs. S. Bryan and niece of Mr. and Mrs. R. O. Nichols of Hamilton North, to Douglas, son of Mr. and Mrs. R. M. Fraser of Broadmeadow, was celebrated at The Church of Christ, Georgetown, by Pastor A. T. Davidson and Mr. Varham. Later a reception was held at the Methodist Hall, Metheron. Mr. R. O. Nichols gave away the bride. She wore a Mantle of Scotland headdress and an embroidered veil with her white lacy frock. She carried stock and azaleas. Her bridesmaid Joyce Fraser, carried her dress.

ZOOM

### Top text-correcrors

1. JohnWarren (2808127)
2. annmanley (1998970)
3. NeilHamilton (1804118)
4. neelwoodhouse (1389249)
5. maurielyn (1349481)

### Recent comments

For Treseavan mine read Tresavean mine... created 2014-10-02 00:10:33.0 by doug.butler

murder suicide, or double murder created 2014-10-02 00:08:36.0 by georgess23

### Recent tags

Government House - 1838 Old Sydney Heylin Elizabeth-street buildings c19... Hyde Park - Sydney 1842 >> All tags

NATIONAL LIBRARY OF AUSTRALIA

API Disclaimer Privacy Terms of Use Copyright

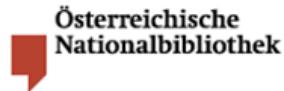
# International Benchmarks

## Netherlands

The screenshot shows the Delpher website homepage. At the top left is the Delpher logo. Top right features a star, gear, question mark, and menu icon. Below the header is a search bar with dropdown menus for 'Kranten' (Newspapers) and 'Boeken' (Books). The search bar contains the placeholder 'Zoeken in kranten uit de 17e, 18e, 19e en 20e eeuw' (Search in newspapers from the 17th, 18th, 19th and 20th century) and a magnifying glass icon. Underneath the search bar are links for 'Zoekhulp' (Search help) and 'Uitgebreid zoeken' (Advanced search). A large teal banner in the center reads 'Ruim 9 miljoen Nederlandstalige krantenpagina's' (Over 9 million Dutch-language newspaper pages) and features a collage of historical newspaper snippets. At the bottom right of the banner are links for 'Nieuwsbrief' (Newsletter) and 'Twitter'. Below the banner, a section titled 'Uitgelicht' (Highlighted) displays three images: a title page for 'DE AMERIKAAN, OF DE...' (likely a satirical or political publication), a newspaper clipping with the headline 'Nederland in oorlog met Duitschland' (Netherlands at war with Germany), and a black and white photograph of a group of people, possibly soldiers or athletes, standing together.

# International Benchmarks

## ANNO – Austrian Newspapers Online



**ANNO**  
Historische Zeitungen  
und Zeitschriften



### Über ANNO

[Was ist ANNO?](#)

[10 Jahre ANNO](#)

[FAQs](#)

[Suchen in ANNO](#)

[Drucken aus ANNO](#)

[Kooperationspartner](#)

[Kontakt](#)

[Impressum](#)

### Service

[ANNOdazumal](#)

[Kurzbeiträge zu historischen  
Zeitungen](#)

[Projektteilnahmen von ANNO  
Zeitungen und Zeitschriften an  
der ÖNB](#)

[Bestellung von Jubiläums- und  
Geburtstagszeitungen](#)

### ANNO - AustriaN Newspapers Online

Historische österreichische Zeitungen und Zeitschriften online

#### Listen

- Alphabetische Liste der Zeitungen und Zeitschriften
- [Jahresübersicht der Zeitungen \(1568-1943\)](#)
- [neu Thematischer Einstieg](#)

#### Suchen

- [neu ANNO-Suche: Volltextsuche in historischen Zeitungen \(1700-1875, 1914-1918\)](#)
- Suche in den Inhaltsverzeichnissen von einigen Zeitschriften

ANNO ist der virtuelle Zeitungslesesaal der Österreichischen Nationalbibliothek. Hier kann in historischen Österreichischen Zeitungen und Zeitschriften online geblättert und gelesen werden.

Alle hier vorgestellten Beiträge finden Sie auch unter "ANNOdazumal" beziehungsweise "Kurzbeiträge zu historischen Zeitungen" in der linken Menüleiste.

26. September 1754

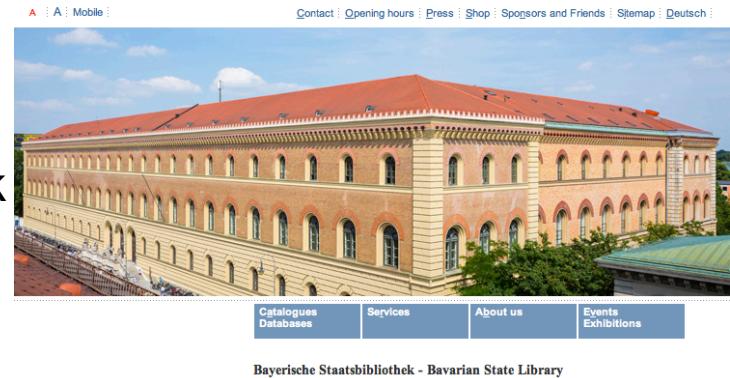
#### Neu bei ANNO

- 7 neue oder ergänzte Titel online! (29.09.14)
- 6 neue oder ergänzte Titel online! (22.09.14)
- 5 neue oder ergänzte Titel online! (15.09.14)

# The participants of our particular project

## Bavarian State Library (BSB) in Munich

- founded in 1558
- is one of the prime European universal libraries and of world renown as international research library
- is continuously enhancing its digital and Internet-based services
- with one million digitised works, the Bavarian State Library holds the largest digital data stock of all German libraries



# The participants of our particular project

## Berlin State Library (SBB) – Prussian Cultural Heritage in Berlin

- founded in 1661
- the library's collections and holdings systematically grew to their present-day status
- 25,000 subscription periodicals and publication series
- 22,000 licensed electronic newspapers and periodicals and 80,000 newspaper volumes and 350 subscription newspapers are currently in their holding



**Staatsbibliothek  
zu Berlin**  
Preußischer Kulturbesitz



# The participants of our particular project

## The State and University Library Bremen (SuUB) in Bremen

- is the city's largest and oldest academic library
- supplies literature to universities and colleges across Bremen and Bremerhaven, while also acting as the state library
- It has a wide stock on newspapers especially from the 17<sup>th</sup> century



Staats- und  
Universitätsbibliothek  
Bremen

# The participants of our particular project

## The University and State Library Saxony Anhalt (ULB) in Halle

- is the largest library in Sachsen-Anhalt
- regarding digitisation the ULB is currently working on the German national bibliographies for the sixteenth and seventeenth centuries (VD16 und VD 17)



Martin-Luther-Universität Halle-Wittenberg  
UNIVERSITÄTS- UND LANDESSTADTBIBLIOTHEK  
SACHSEN-ANHALT



Catalogues   Image-cat   GBV   KVK   Databases   Branch Libraries   A-Z

OPAC   [Suche im ULB-Katalog](#)

# The participants of our particular project

## The German National Library (DNB) in Frankfurt

- based in Leipzig and Frankfurt
- Frankfurt site of the German National Library is responsible for the development of information and communication technology
- including development and management of the central database, like the ZDB
- ZDB is the world's largest specialized database for serial titles (journals, annuals, newspapers etc., incl. e-journals)



**The ZDB: what it is**  
The ZDB is the world's largest specialized database for serial titles (journals, annuals, newspapers etc., incl. e-journals). The ZDB-network is managed by the [Staatsbibliothek zu Berlin](#); the database is held on a server of the [Deutsche Nationalbibliothek](#).

**The ZDB: what it contains**  
The ZDB actually contains more than 1.7 million bibliographic records of serials from the 16<sup>th</sup> century onwards, from all countries, in all languages, held in 4,400 German and Austrian libraries, with 13.6 million holdings information. It does *not* contain contents, i. e. journal articles.

The responsibility for the maintenance and further development of the ZDB lies with the [Staatsbibliothek zu Berlin - Preußischer Kulturbesitz](#) and the [German National Library](#).

# The participants of our particular project

## Saxon State and University Library Dresden (SLUB) in Dresden

- is one of the largest and best endowed academic libraries in Germany
- serves as the university library of Dresden University of Technology
- digital collections currently contain more than *81,000 titles, 136,000 volumes* and over *1.5 Million* media items (images, maps, drawings)



# National website digiPress – BSB Munich

The screenshot shows the homepage of the digiPress website, which is a digital archive of Bavarian newspapers. The header features the digiPress logo with a 'beta' badge, the BSB Bayerische Staatsbibliothek logo, and a navigation bar with links for Start, Kalender, Volltextsuche, Zeitungen, Projekt, Kontakt, Impressum, and Hilfe. Below the header is a large search bar containing binary code. The main content area is titled 'Liste aller Zeitungen' and displays a grid of newspaper titles grouped by letter (A through E). Each group has a 'nach oben' link at the bottom right. The background of the page is a collage of historical newspaper pages.

**Liste aller Zeitungen**

A

- Allerneueste Nachrichten oder Münchener Neugkeits-Kourier [\[1\]](#)
- Allerneuestes Gradaus mein deutsches Volk [\[1\]](#)

B

- Bayerische Ostmark Coburger National-Zeitung [\[1\]](#)
- Bayerisches Brauer-Journal [\[1\]](#)
- Bayern-Warte und Münchener Stadtanzeiger [\[1\]](#)
- Blätter für das Volk zunächst in Bayern [\[1\]](#)
- braune Sonntagszeitung, Die [\[1\]](#)

C

- Coburger Nationalzeitung [\[1\]](#)
- Coburger Regierungs-Blatt [\[1\]](#)
- Coburger Regierungs-Blatt / Bezirksamt Coburg [\[1\]](#)
- Coburger Zeitung [\[1\]](#)

D

- Das freie Wort [\[1\]](#)
- Der freie Staatsbürger [\[1\]](#)
- Der Freund der Wahrheit und des Volkes [\[1\]](#)
- Der gerade Weg [\[1\]](#)
- Der Reichsbote [\[1\]](#)
- Deutsche constitutionelle Zeitung [\[1\]](#)
- Deutsches Wochenblatt für constitutionelle Monarchie [\[1\]](#)
- Die braune Sonntagszeitung [\[1\]](#)

E

- Es muß Tag werden [\[1\]](#)

**- concentrating on most interesting Bavarian newspapers**

# National website ZEFYS – Zeitungsinformationssystem SBB

The screenshot shows the homepage of the ZEFYS website. At the top, there is a banner featuring a historical illustration of people in a library or study setting. The text in the banner reads: "Der Reichskanzler hat f... Seine Majestät der em Throne zu entlägen". The banner also includes the logos of the Staatsbibliothek zu Berlin and the Stiftung Preußischer Kulturbesitz.

The sidebar on the left contains the following navigation links:

- Start
- Metasuche
- Digitalisierte Zeitungstitel
- Jahresübersicht
- Erscheinungsänder
- Amtspresse Preußens
- DDR-Presse
- Internetressourcen
- Bibliographische Recherche
- Informationen zu Zeitungen
- Über uns

Below the sidebar, there is a link to "english".

The main content area features a large heading "ZEFYS Zeitungsinformationssystem". Below it, a text block states: "Im Zeitungsinformationssystem finden Sie digitalisierte historische Zeitungen, Volltexte und ausgesuchte Internetquellen und Datenbanken zum Thema Zeitung." A section titled "Was bietet ZEFYS?" lists several features with corresponding icons:

- ZEFYS weist derzeit insgesamt **179.183** Ausgaben von **139 historischen Zeitungen** aus Deutschland und deutschen Zeitungen des Auslands nach.
- 2 neu hinzugekommen oder ergänzt:** Neue Preußische Zeitung (23.09.2014), Berliner Börsenzeitung (26.09.2014)
- In der **Amtspresse Preußens** bietet ZEFYS drei sonst recht seltene und schwer zugängliche Titel der Bismarckschen Regierungsperiode als Faksimile und recherchierbaren Volltext.
- In der **DDR-Presse** werden im Rahmen eines von der Deutschen Forschungsgemeinschaft (DFG) geförderten Projekts drei DDR-Tageszeitungen digitalisiert und im Volltext erschlossen.
- Ausgesuchte und intellektuell erschlossene **Internetressourcen** lassen Sie leichter Datenbanken und Information zu Zeitungen im Web finden.
- Die **Bibliographische Recherche** lässt Sie Zeitungstitel in der weltweit größten Periodikadatenbank finden, der **Zeitschriftendatenbank (ZDB)**, finden.

- concentrating on  
Prussian newspapers  
and newspapers of  
the former GDR

# National website 4 GDR newspapers on ZEFYS

The screenshot shows the ZEFYS website interface. At the top, there are logos for Staatsbibliothek zu Berlin and Stiftung Preußischer Kulturbesitz. Below this is a banner featuring a historical newspaper clipping from 'NEUES DEUTSCHLAND' with the headline 'Hetzreden verurteilt'. To the right of the banner is another news snippet about DDR citizens traveling to the FRG. A search bar labeled 'Seitensuche' is at the bottom right of the banner area.

**Startseite Links:**

- ▶ Start
- ▶ Metasuche
- ▶ Digitalisierte Zeitungstitel
- ▶ Jahresübersicht
- ▶ Erscheinungsländer
- ▶ Amtspresse Preußens
- ▼ DDR-Presse
  - ▶ Informationen zum Projekt
  - ▶ Nicht beschaffbare Ausgaben und Seiten
  - ▶ Zugang
  - ▶ Kalender
  - ▶ Volltextsuche
  - ▶ Kontaktformular
  - ▶ Links
- ▶ Internetressourcen
- ▶ Bibliographische Recherche
- ▶ Informationen zu Zeitungen
- ▶ Über uns

**Search Results:**

## Ergebnisse der Auswahl/Suche

zurück zur [Startseite DDR-Presse](#) ▶ oder zum [Kalender](#) ▶

Suchbegriff(e)  [Suchen](#) [Hinweise](#) [Suchoptionen zeigen](#)

1301 Ergebnisse gefunden (Treffer 1 .. 10):

1 [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) ... [131](#)

**Anerkennung für die Arbeit der Frauen unserer Republik**

**Neue Zeit, 15. Oktober 1961 (Jahrgang 17, Ausgabe 242), Seite 1** ▶  
... Maßnahmen vom 13. August, durch die an den Grenzen der DDR ein **antifaschistischer Schutzwall** errichtet worden sei. Diese Maßnahmen entsprachen nicht nur ... [weiterlesen...](#) ▶

**Im Sozialismus finden alle Frauen wahres Glück**

**Neues Deutschland, 15. Oktober 1961 (Jahrgang 16, Ausgabe 284), Seite 1** ▶  
... brechen. Darum war es notwendig, an den Grenzen der DDR einen **antifaschistischen Schutzwall** zu schaffen. Es war auch deshalb notwendig, weil ... [weiterlesen...](#) ▶

# europeana newspapers

The European Library  
Connecting knowledge

About    Membership    For Current Partners    Log in    English (en) ▾

Search all European Library content... **GO** Advanced search

HOME    DISCOVER    ACCESS OUR DATA

Home → Newspapers Home

Search    Discover    Content    Project

## Search Newspapers

Search within historic newspapers...

**GO**



### Explore newspapers by country

You can search a map showing source of newspapers

▶ Filter by library, date or language

## On This Day In History



### Show all newspapers titles

You can search through all available newspaper titles in the Newspapers portal



### Show all newspapers issues

You can search through all available newspaper issues in the Newspapers portal



### Explore newspapers by country

You can search a map showing source of newspapers



### Explore newspapers by date

You can discover the newspaper content by date of publication



### Explore newspapers by title

You can browse all available titles alphabetically

## FREQUENTLY ASKED QUESTIONS

# europeana newspapers project 2012-2015: 18 partners

The screenshot shows the Europeana Newspapers project website. At the top, there's a header with the Europeana logo and a search bar. Below the header, a navigation menu includes links for About, Core Goals, News, Our Network, Events, Public materials, and Contact. The main content area features two large sections. The first section, titled "The Europeana Newspapers Project Will...", has a sub-section titled "1. Make Digital Newspapers Easier To Search". It contains text about the challenges of searching digitized newspapers and a screenshot of a software interface showing a newspaper page being processed by Optical Layout Recognition (OLR). The second section, titled "EXPLORE", shows a grid of historical newspaper pages from various countries. To the right of the website screenshot, there's a vertical column of historical newspaper snippets.

## The Europeana Newspapers Project Will...

### 1. Make Digital Newspapers Easier To Search

When newspapers are digitised, the resulting electronic version is often simply an image of the newspaper. It is not always possible to effectively search for images, articles or individual terms within the text.

Europeana Newspapers aims to change that. It will create full-text versions of about 10 million newspaper pages. It will also detect and tag millions of single articles with related

A newspaper separated into articles through techniques such as Optical Layout Recognition (OLR).

## EXPLORE

Historic Newspapers on [www.europeana.eu](http://www.europeana.eu)

The EXPLORE platform allows users to search and browse through a vast collection of historical newspaper pages. The interface features a grid layout where each cell contains a thumbnail of a newspaper page from a specific country and time period. The platform is designed to make it easier to find and access historical news content across different languages and cultures.

from Germany  
newspapers  
Berlin and  
Hamburg

# Six libraries – one masterplan

## Key task

- for all six libraries to merge all their know-how in digitisation of historical newspapers into one masterplan
- this plan will make available information about the most important technical and strategic questions
- within the project each library has its own tasks
- all six libraries continue in digitising a lot of historical newspapers from the 17<sup>th</sup> century to 1945



# The participants of our particular project



- SBB/Berlin and DNB/Frankfurt are working on a revised and updated website of the ZDB
- which includes more information about historical newspapers and their digital copies

Treffer 1 - 20 von 1.766.720	Sortierung	Titel (aufsteigend)
		Krakow historical monographs / Jagiellonian University, Institute of History
		Kraków : Societas Vitulana 1.2009
		Strassengüterverkehr, ÖVP : offizielle Fachzeitschrift der Fachgruppen des Güterbeförderungs- und Autobusgewerbes Wien, . Ausgabe Wien
		Wien : Österreichischer Wirtschaftsverl. 2000
		International understanding / Chinese Association for International Understanding
		Beijing 1986 - 1992 nachgewiesen
		IDerivate-Magazin : erfolgreich in Derivate investieren
		Berlin : DMG, Derivate Magazin GmbH 2005,Quartal 3 -



**Staatsbibliothek  
zu Berlin**  
Preußischer Kulturbesitz

# The participants of our particular project

**SB Berlin:** developing Open Source-Software Goobi for newspapers, digitisation of the „Berliner Zeitungen“ by microfilm

**BSB München:** digitisation of two newspapers (Cotta´sche „Allgemeine Zeitung“) with OCR with provider

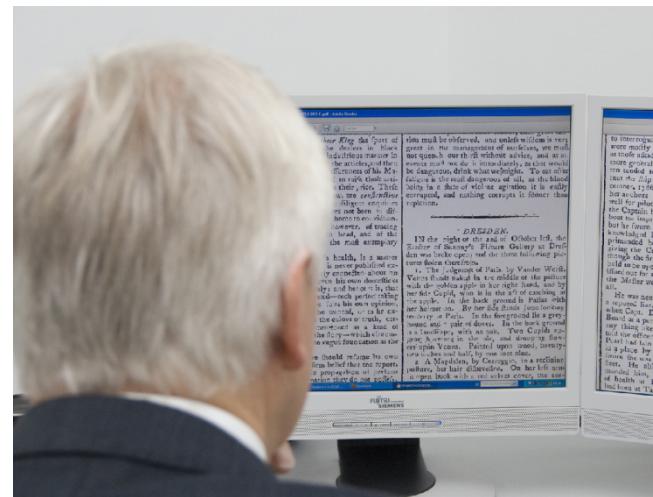
**SuB Bremen:** digitisation of nearly all newspapers of the 17th century

**ULB Halle:** digitisation of one newspaper of the original source (Hallesches Tageblatt), concentration on URN granular

**SLUB Dresden:** digitisation by original and microfilm, coordination and masterplan

# What we did

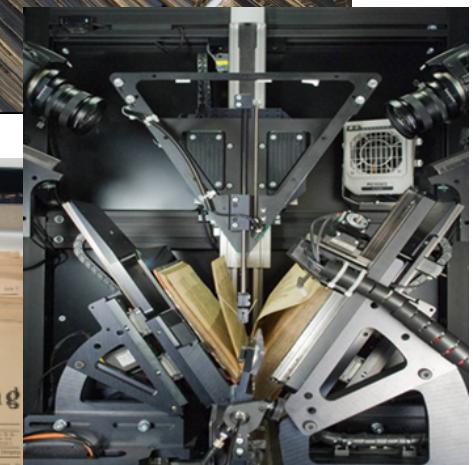
1. Tools and Processes
2. Modes of presentation
3. Methods of selection



# Tools and Processes

## Facts about

- scan quality, especially on original or microfilm scan-options and recommendations
- OCR (Optical Character Recognition)
- structural data
- gap supplement
- URN granular (Uniform Resource Name)



# Modes of Presentation

## Facts about

- new face of the ZDB
- DFG-Viewer
- a vision of a national aggregator in the Deutsche Digitale Bibliothek (DDB)

The screenshot displays the DFG-Viewer interface. At the top, there's a green header bar with 'ULB Sachsen-Anhalt' and the DFG logo. Below it, the main title 'DFGviewer' is followed by a link 'Mehr zum DFG-Viewer: DFG-Viewer | DE'. The interface includes a 'Jahrgangsübersicht - HALLESCHES TAGEBLATT 1890' (Year Overview - Halle'sches Tageblatt 1890) and a 'Kalender Listenansicht' (Calendar List View). A large calendar grid for January through June 1890 is shown, with specific dates like '13.2.1890 (No. 37)' highlighted. Below the calendar, a detailed view of the front page of the 'Halle'sches Tageblatt' from October 7, 1890 (No. 234) is presented. The page features a decorative title 'Halle'sches Tageblatt' with a star and crescent emblem, and text indicating it is an 'Amtliches Verordnungsblatt für die Stadt Halle'. The date 'Dienstag, den 7. Oktober 1890.' is at the bottom. The right side of the interface shows a sidebar with navigation links for 'Halle'sches Tageblatt' and the year '1890'.

# Methods of selection



## Facts about

- what is it, that the researchers want and what is it, that the libraries could achieve

# Our recommendations



- developing a german national aggregator in the „Deutsche Digitale Bibliothek“ (lots of German newspapers into one platform)

creating a coordination role in themes, in quality, in selection, data

- developing the ZDB as central *register* and integration of more sources (from archives)

# Our recommendations

## Selection mode and quality standards

1. Provide a representative, typological spectrum
2. „Long runners“ (long running newspapers of wide reach)
3. Newspapers of record mass circulation
4. „Innovators“ (newspapers with innovations in mass-media history)
5. Thematic collections
6. Exponents of exemplary importance
7. Cross-section of political bias -> diversification of the press, 19<sup>th</sup>C.
8. Regional and local cross-section, esp. 19<sup>th</sup>C.



# Our recommendations

## Quality Standard I

- Images acquisition of structural data
- OCR-full text

## Quality Standard II

- separate articles and manual/semi-automatic correction /article segmentation

- Normdatenverknüpfung (GND)  
*namend entity recognition*

- in-depth factual analysis

- image analysis, image recognition

## Quality Standard III

- Quality Standard I = basic
- Quality Standard II + III = depending on the source and need

# Thank you!

