

# IIIF – Kulturinstitutionen schaffen interoperable Schnittstellen für digitalisiertes Kulturgut

Leander Seige, 2017, Leipzig, 34C3



# Über mich

Leander Seige

- Bereichsleiter Digitale Dienste  
Universitätsbibliothek Leipzig
- Eigene Projekte aus persönlicher Motivation



# Bilder sind fundamentale Informationsträger des kulturellen Erbes

- Handschriften und Drucke
- Zeichnungen, Gemälde, Stiche
- Landkarten
- Objekte
- u.v.m.



Bilder: Wikimedia Commons

# Digitalisierung von Kulturgut

Verbesserung  
der Zugänglichkeit

+

Schutz der Originale



# Bisherige Auslieferung von Bilddigitalisaten ist in der Regel institutionell orientiert und siloartig.

- Isolierte Daten (nicht oder schwer verknüpfbar)
- Schwergängige Darstellung großer Bilddateien
- Langsam und schwierig zu realisieren

choose a passage:

Tobit Chapter 1 Verse 7

choose a page:

Quire: 37 Folio: 3 v

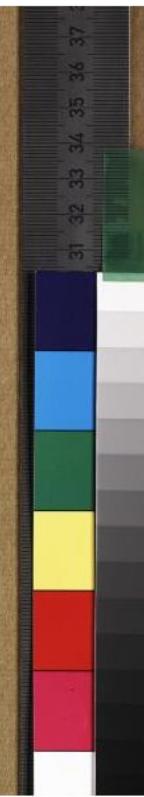
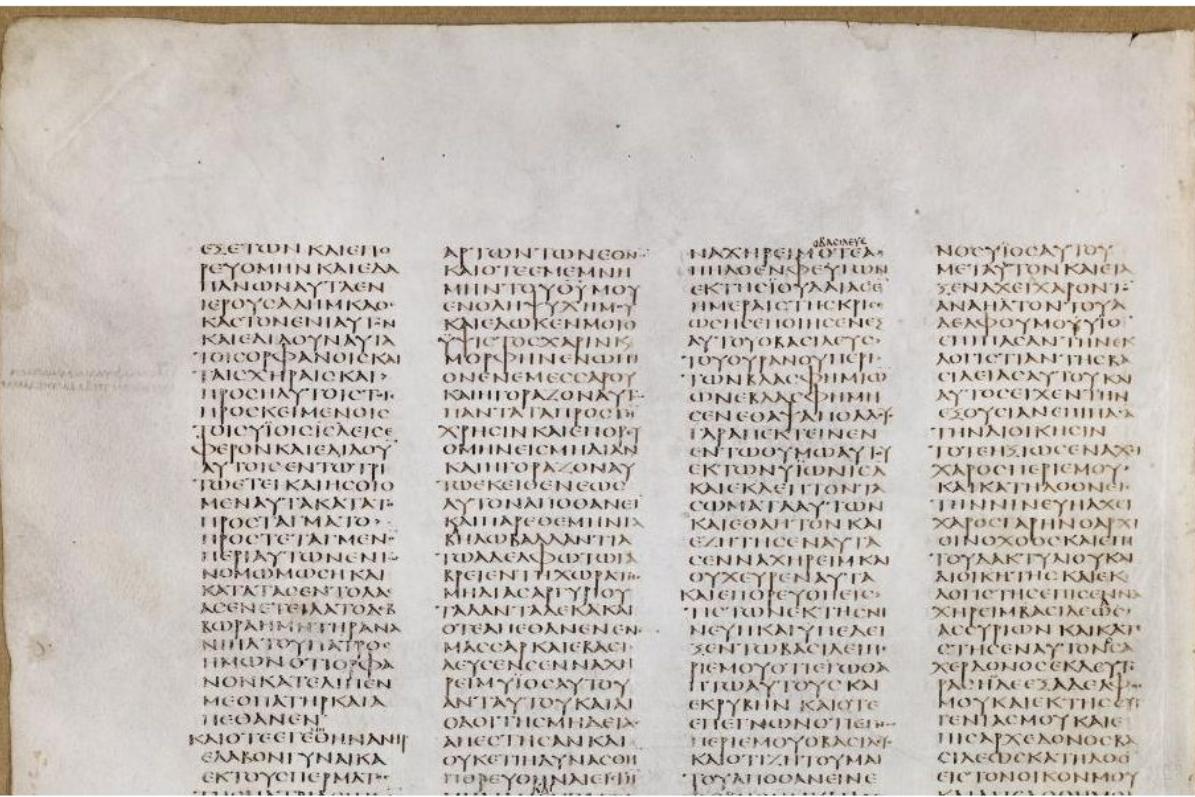
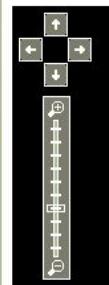
display options:

- Image     Translation  
 Transcription     Physical Description

Tobit, 1:7 - 2:2 library: LUL folio: xix\_v scribe: D

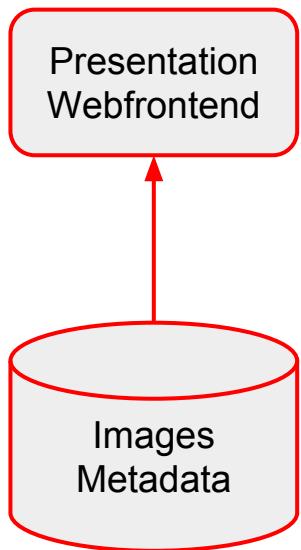
Standard Light Raking Light i

Image

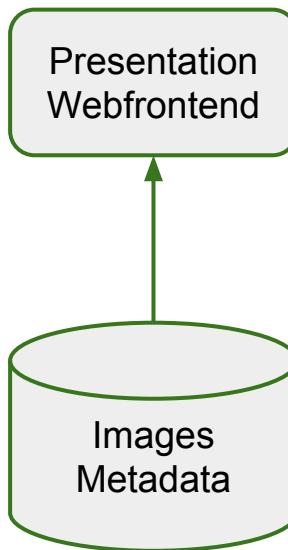


# Datensilos

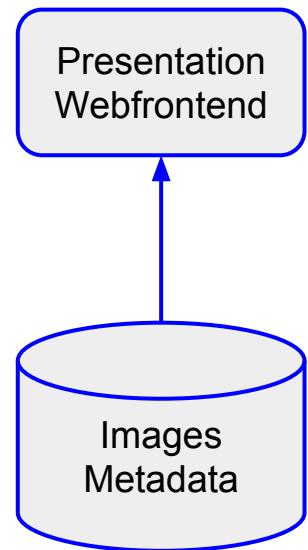
Library A



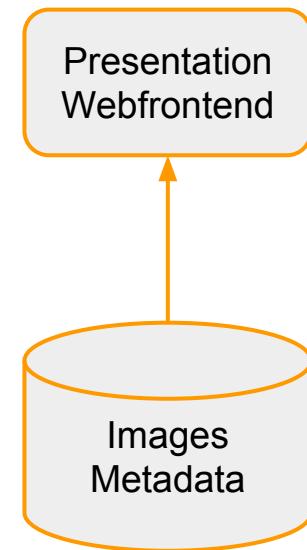
Museum B



Archive C



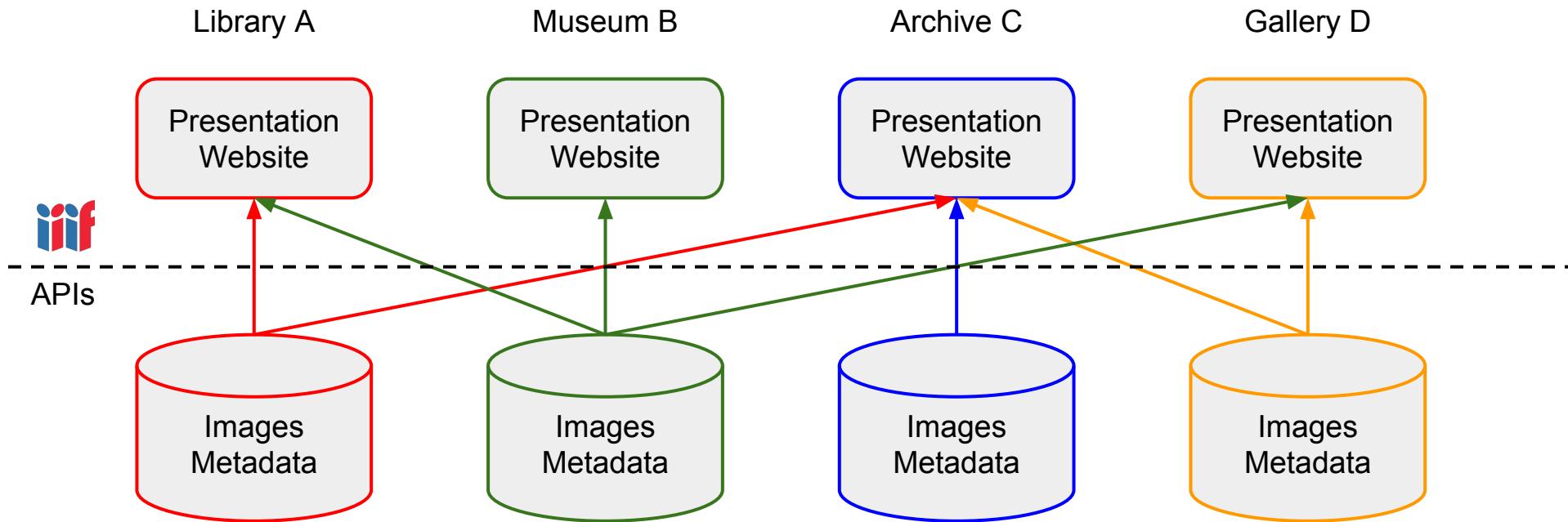
Gallery D



# International Image Interoperability Framework



# Die Idee von IIIF: interoperable APIs für Digitalise



# IIIF Community

## Consortium

- Stanford University Libraries
- The British Library
- Bodleian Libraries at Oxford
- Bayerische Staatsbibliothek
- Bibliothèque nationale de France
- Vatikanische Bibliothek
- u.v.m.

## Community

- Universitätsbibliotheken
- Nationalbibliotheken
- Museen, Archive
- Archive.org
- u.v.m.

<http://iiif.io/community>

# APIs

- **Pixel: IIIF Image API 2.1** (Core API)
- **Struktur- und Metadaten: IIIF Presentation API 2.1** (Core API)
- Suchen in Annotationen: IIIF Search API 1.0
- Authentifizierung: IIIF Authentication API 1.0

CC-BY, <http://iiif.io/technical-details/>

# Shared Canvas Data Model

- Linked Data based approach (JSON-LD)
- globally unique identifiers: HTTP URIs

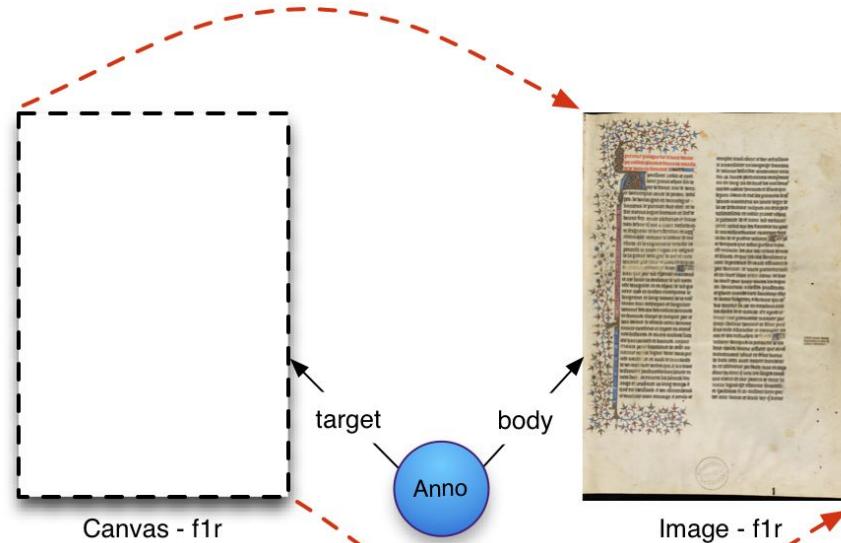
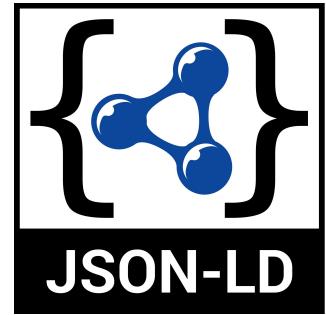
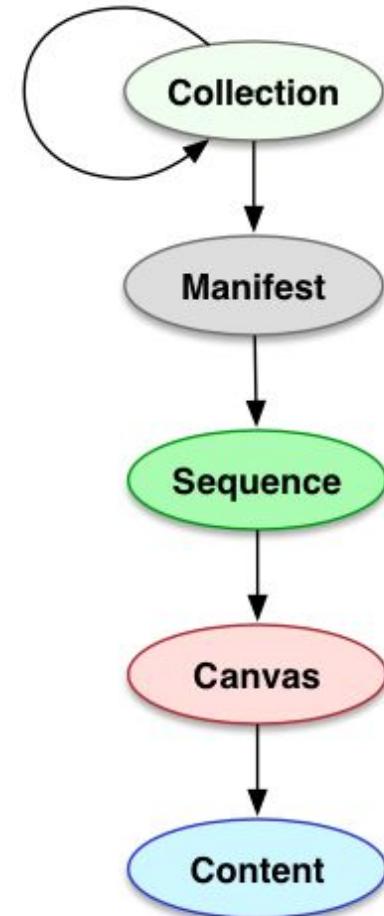


Bild: Dokumentation Shared Canvas Data Model  
<http://iiif.io/model/shared-canvas/1.0/>

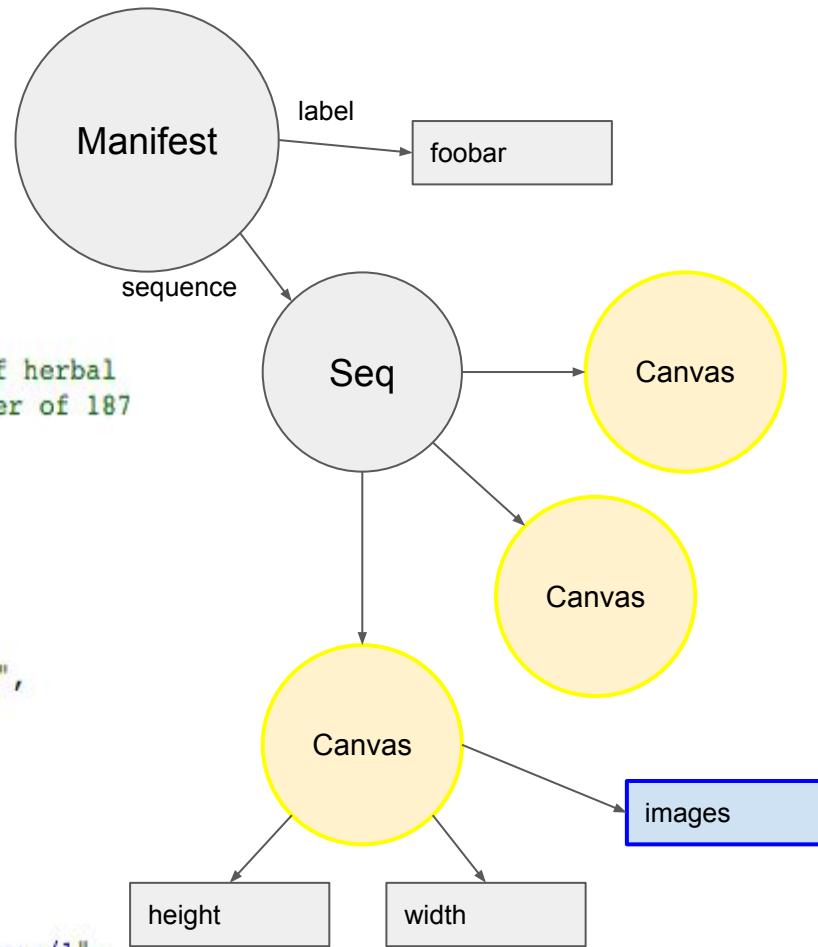
# Presentation API

- Structure
  - Collection, Item, Sequence, Parts
- Properties
  - Labels, description, license, attribution, links



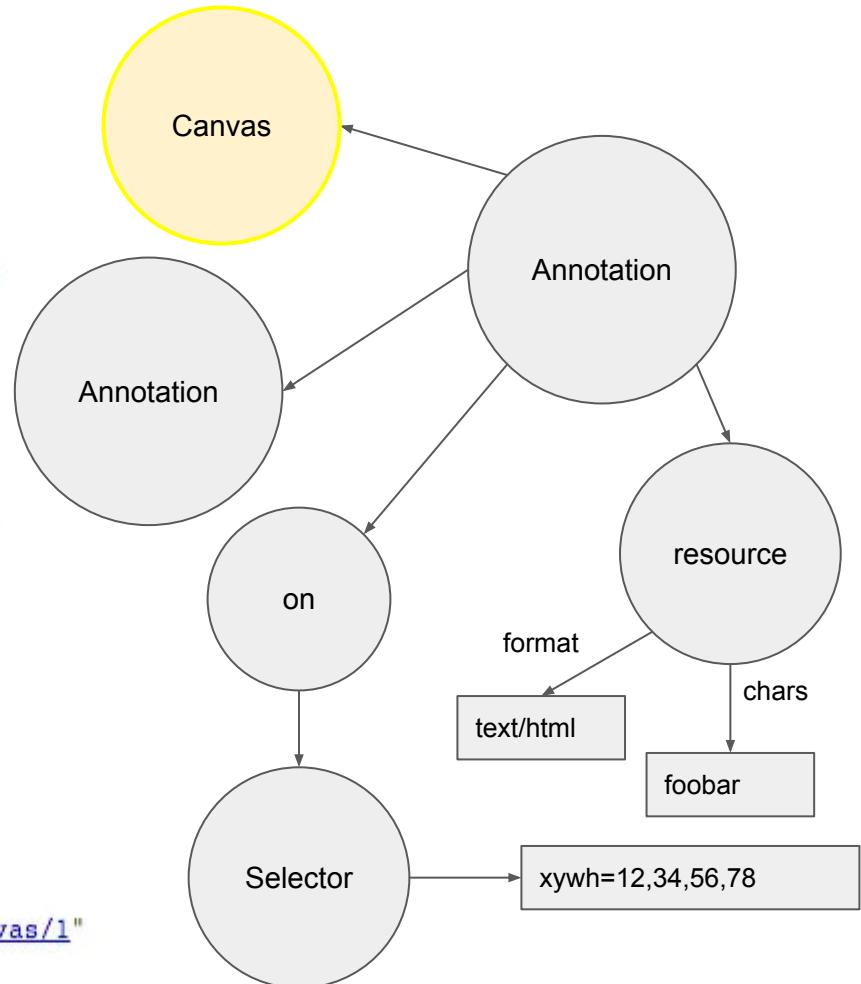
# IIIF-Manifeste

```
{  
  @id: "http://iiif.ub.uni-leipzig.de/0000000001/manifest.json",  
  @type: "sc:Manifest",  
  description: "The Papyrus Ebers is an Egyptian medical papyrus of herbal  
  of ancient Egypt, it was purchased at Luxor (Thebes) in the winter of 187  
  Leipzig, in Germany. (source: Wikipedia)",  
  logo: "http://iiif.ub.uni-leipzig.de/ubl-logo.png",  
  label: "Papyrus Ebers",  
  attribution: "Leipzig University Library",  
  - sequences: [  
    - {  
      @id: "http://iiif.ub.uni-leipzig.de/0000000001/sequence/1",  
      @type: "sc:Sequence",  
      - canvases: [  
        - {  
          label: "Papyrus Ebers",  
          @type: "sc:Canvas",  
          width: "158530",  
          @id: "http://iiif.ub.uni-leipzig.de/0000000001/canvas/1",  
          height: "2827",  
          - images: [  
            - {  
              label: "foobar"  
            }  
          ]  
        }  
      ]  
    }  
  ]  
}
```

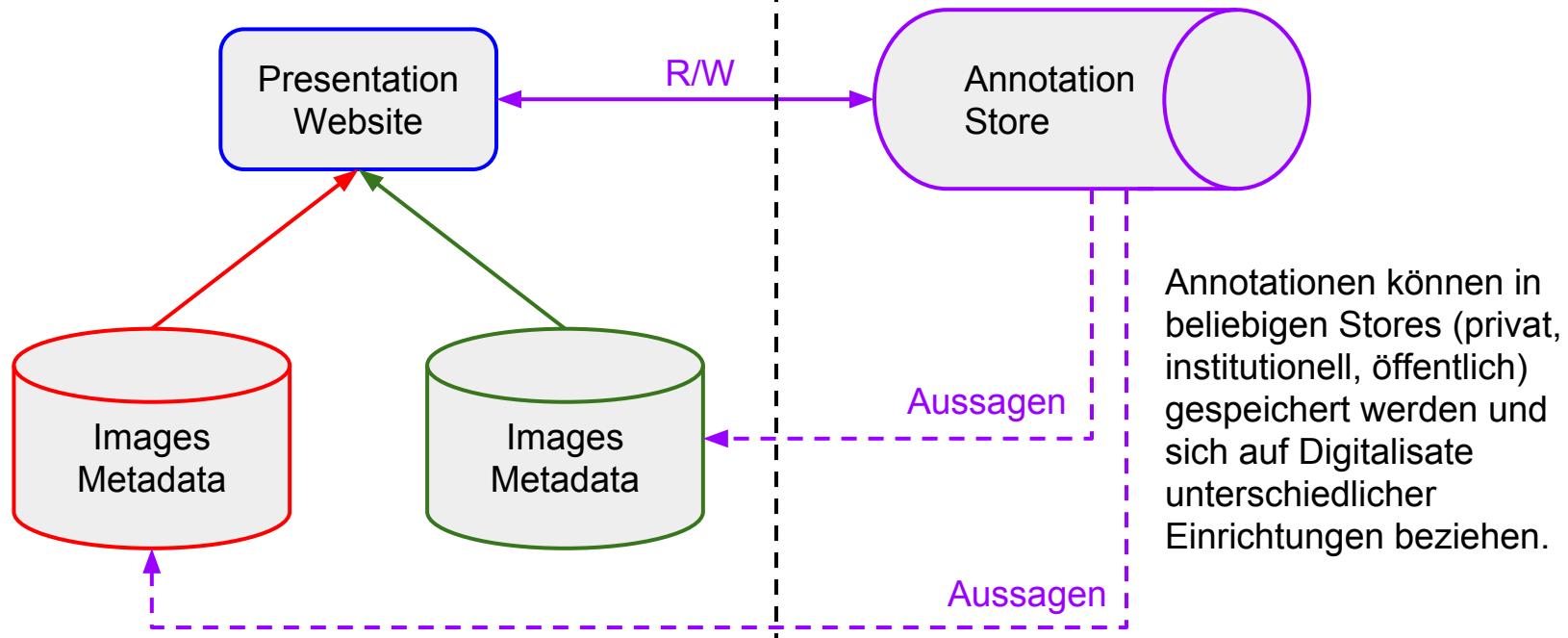


# Annotationen als Triple

```
[  
  - {  
      @id: "http://dev.llgc.org.uk/annotation/1458904227863",  
      @type: "oa:Annotation",  
      - resource: [  
          - {  
              @id: "_:b2",  
              @type: "dctypes:Text",  
              format: "text/html",  
              chars: "<p>test annotation, to be deleted.</p>"  
          }  
      ],  
      - on: {  
          @id: "_:b0",  
          @type: "oa:SpecificResource",  
          - selector: {  
              @id: "_:b1",  
              @type: "oa:FragmentSelector",  
              value: "xywh=155543,375,1694,1022"  
          },  
          full: "http://iiif.ub.uni-leipzig.de/0000000001/canvas/1"  
      },  
      - motivation: [  
          "oa:commenting"  
      ]  
  }]
```



# Annotationen



# Software für Presentation API

Es existieren inzwischen einige Image-Viewer

<http://iiif.io/apps-demos/#image-viewing-clients>

Beispiel Mirador

<http://projectmirador.org/>

- Multi-Dokumentenfähig
- Nutzt OpenSeadragon
- Image Manipulation
- Unterstützt die flexible Nutzung von Annotation
- Apache Lizenz

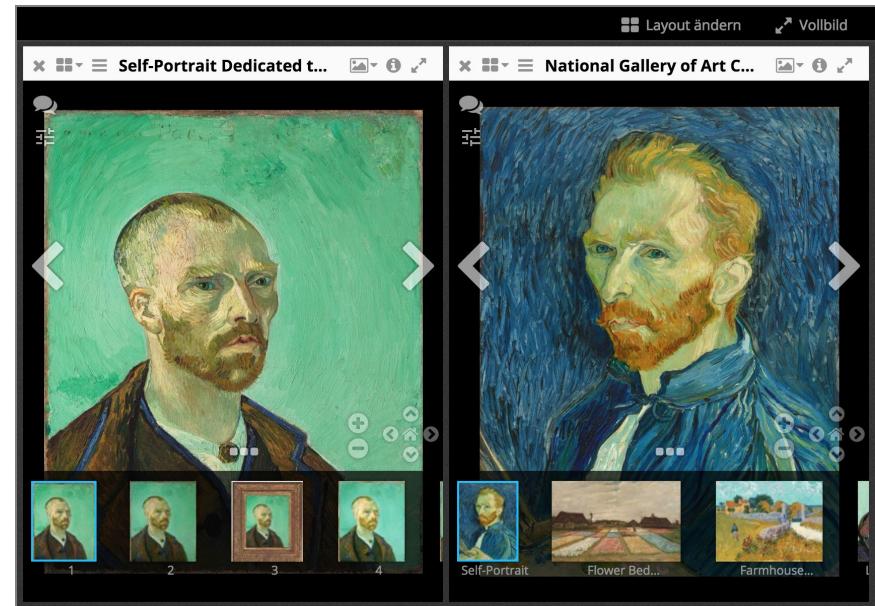
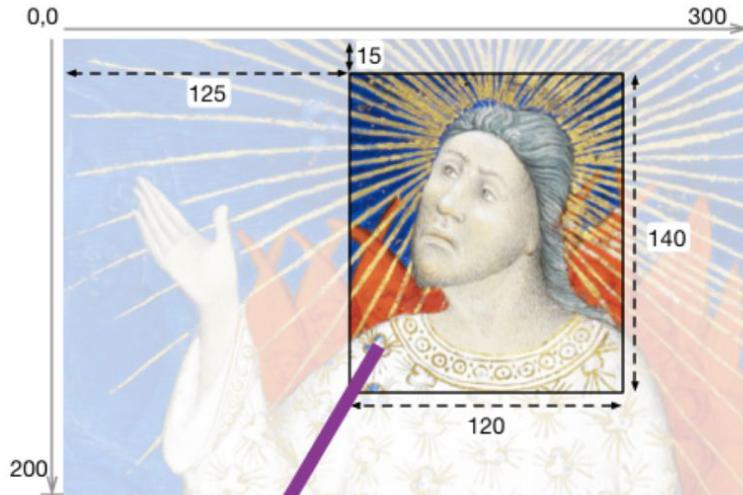
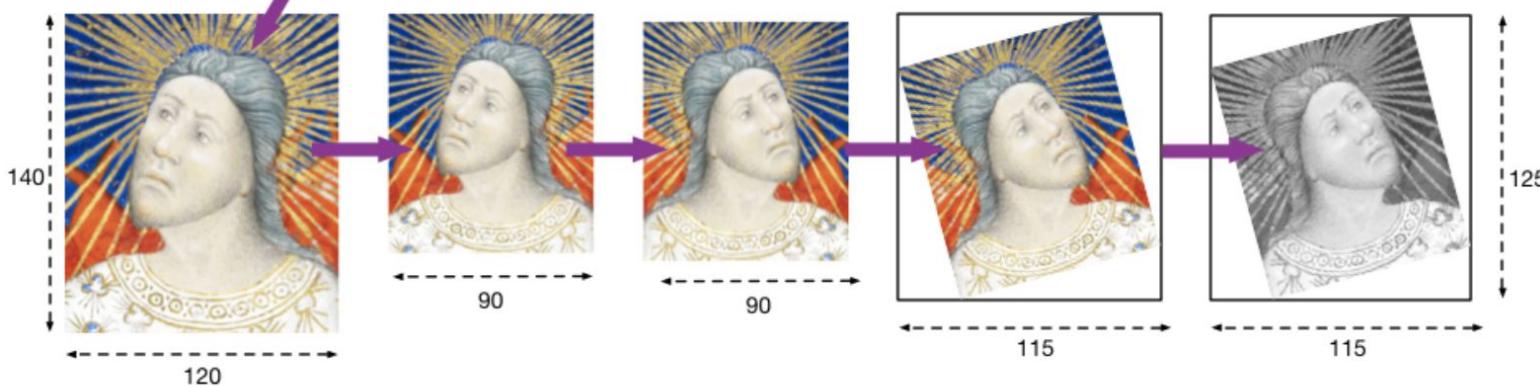


Bild: Screenshot projectmirador.org



# Image API (Pixel Delivery)

<http://iiif.io/api/image/2.1/>



region=125,15,120,140 size=90, rotation=!345 quality=gray  
.../125,15,120,140/90,!345/gray.jpg

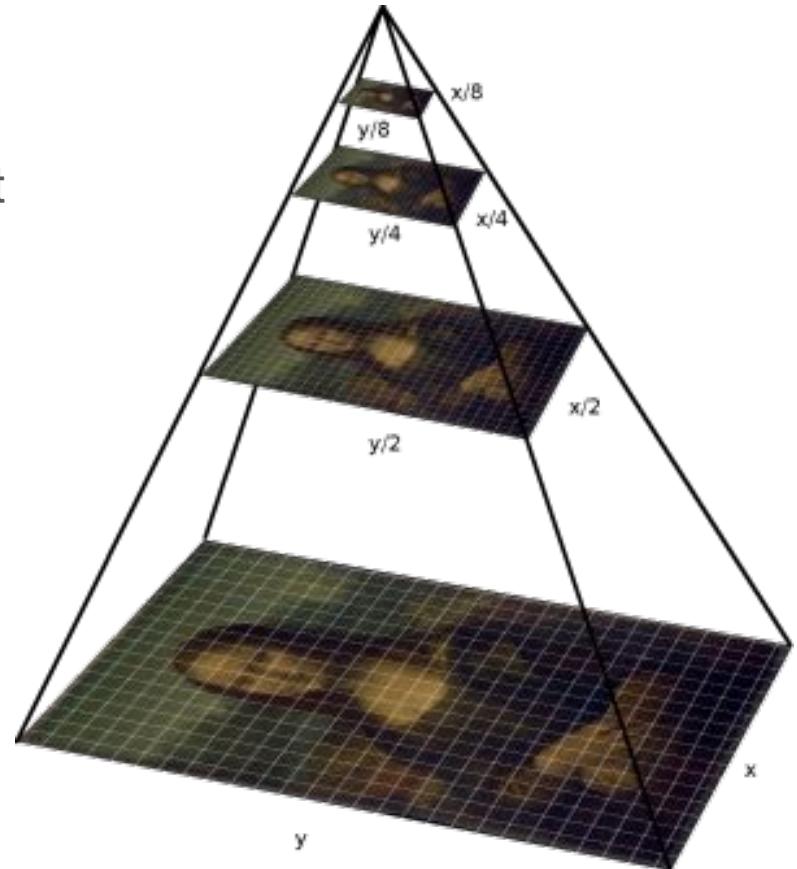
Bild: Dokumentation IIIF Image API

# Software für die Image API

Wird von zahlreichen Image-Servern unterstützt

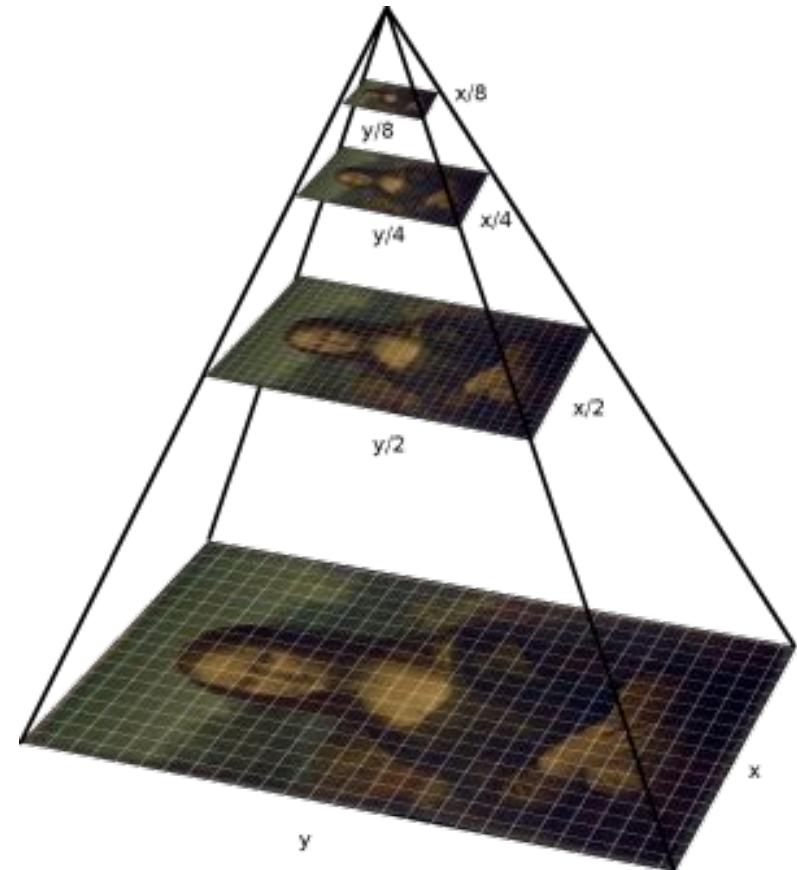
<http://iiif.io/apps-demos/#image-servers>

Beispiel IIPIImage Server  
(FastCGI-Modul für Apache, GPLv3)



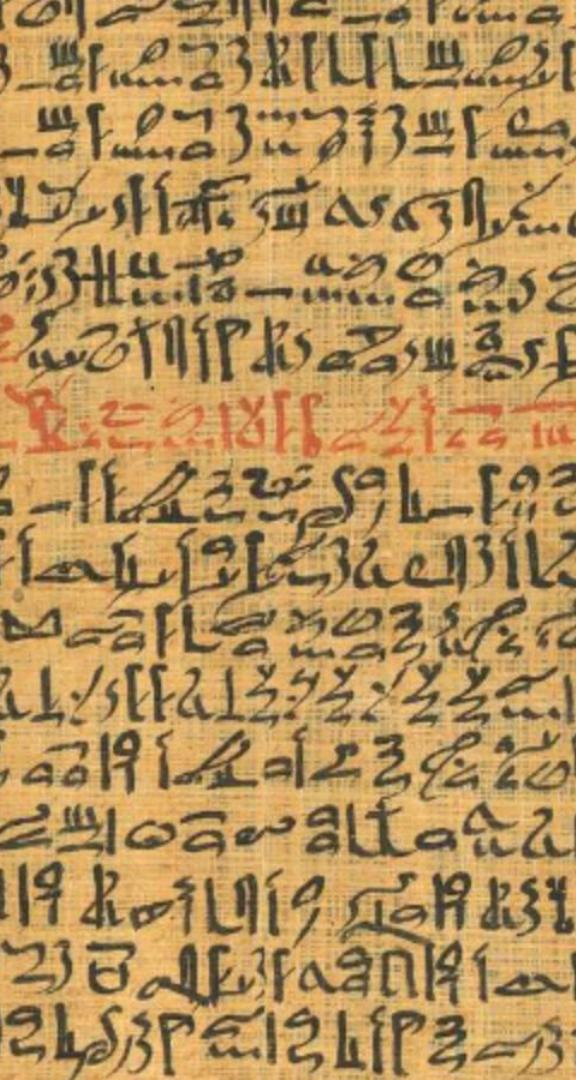
# Präprozessierte Dateien

- Tiled Multi-Resolution (or Tiled Pyramidal)
- üblich: TIFF oder JPEG2000
- Geringe Auswahl an geeigneter Software
  - TIFF: ImageMagick (Open Source)
  - JPEG 2000: Kakadu (Commercial)
  - JPEG 2000: OpenJPEG?



# Beispiel Papyrus Ebers

- Papyrus scroll from Egypt
- Age: > 3,500 years (from 16th century BC)
- Description of 879 medical treatments



# Beispiel Papyrus Ebers

Special requirements:

- Unusual format (scroll): 18,63 m (20,37 yards) x 0,30 m (11,81 inches)
- Integrate Mirador with Wordpress for static content
- Translations for the whole text and in different languages
- Search in annotations (**linking not implemented yet**)
- Individual modifications of the layout

Demo: <http://papyrusebers.de>



Übersetzung an/aus

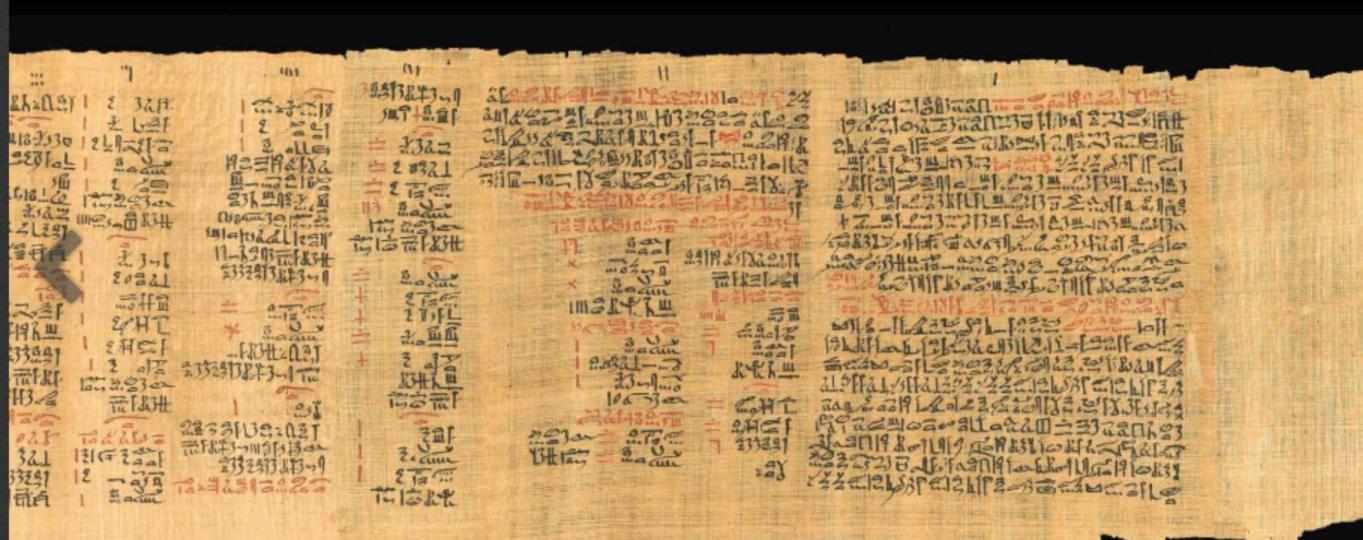
Übersicht



Rückseite li...

Vorderseite

Rückseite r...





Übersetzung an/aus

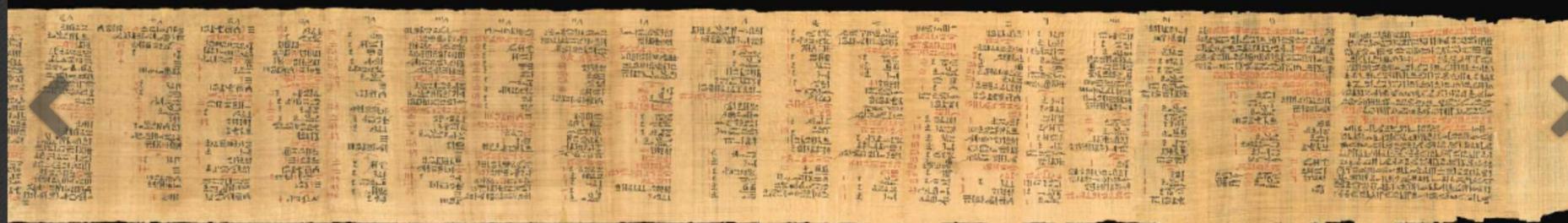
Übersicht



Rückseite li...

Vorderseite

Rückseite r...





Übersetzung an/aus

Übersicht



Rückseite li...

Vorderseite

Rückseite r...



145.819 x 2.827 Pixel



Übersetzung an/aus

Übersicht



Rückseite li...



Vorderseite



Rückseite r...





Übersetzung an/aus

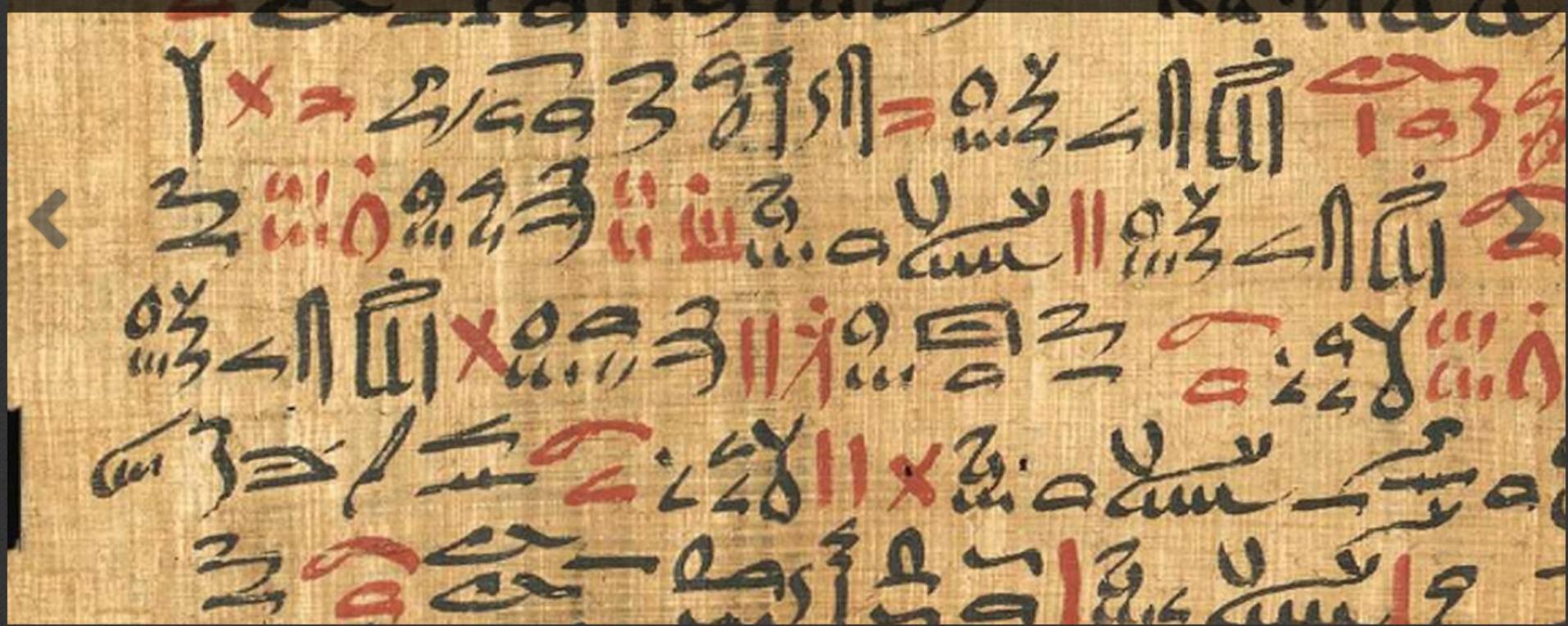
Übersicht



Rückseite li...

Vorderseite

Rückseite r...





Translation on/off

Overview



Back to the...

Front of th...

Back to the...

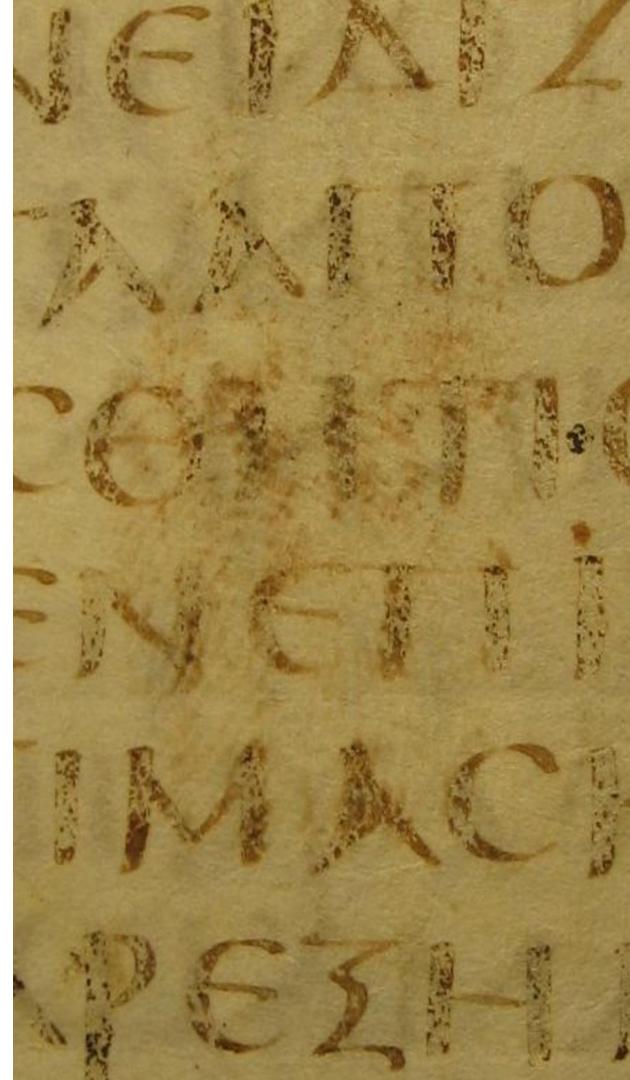


### Eb 465 (66, 9 – 66, 12)

Another to make the hair of a bald-headed person grow: fat of lion 1, fat of hippopotamus 1, fat of crocodile 1, fat of cat 1, fat of serpent 1, fat of ibex 1, are mixed together, and the head of a bald person is anointed therewith.

# Beispiel Codex Sinaiticus

- Manuscript of the Christian Bible
- Written in the middle of the 4th century
- Earliest complete copy of the New Testament
- Distributed between four institutions
  - The British Library (347 leaves)
  - Leipzig University Library (43 leaves)
  - National Library of Russia
  - St. Catherine's Monastery, Mt. Sinai, Egypt



# Codex Vaticanus Graecus 1209



A screenshot of the DVL (Digitivatis) website. The top navigation bar includes 'Back', 'DVL DIGITIVATIS', '+ ADD VIEW', 'English', and a flag icon. Below the navigation is the title 'Manuscript – Vat.gr.1209'. The main image shows the back cover of the manuscript, which is yellowish-brown with a large circular stamp in the center. A watermark across the cover reads 'Biblioteca Apostolica Vaticana ALL RIGHTS RESERVED'. Below the image is a horizontal strip showing thumbnail previews of the first seven pages of the manuscript. The first page is highlighted in blue and labeled 'FIRST'. The last page is labeled 'LAST'. The thumbnails are numbered I through VII.

Screenshot Vatikanische Bibliotheken

Screenshot Wikipedia

New Testament manuscript  
papyri • uncials • minuscules • lectionaries



Page from *Codex Vaticanus*; ending of 2 Thes  
and beginning of Heb

Name	Vaticanus
Sign	B
Text	Old and New Testament
Date	c. 300–325
Script	Greek
Now at	Vatican Library
Cite	C. Vercellonis, J. Cozza, <i>Bibliorum Sacrorum Graecus Codex Vaticanus</i> , Roma 1868.
Size	27 × 27 cm (10.6 × 10.6 in)
Type	Alexandrian text-type
Category	I
Note	very close to $\tilde{\pi}^{66}$ , $\tilde{\pi}^{75}$ , 0162

# Demo Codex Vaticanus und Codex Sinaiticus

Mirador: <https://digital.ub.uni-leipzig.de>

Codex Sinaiticus (testing, Leipzig leaves only!)

<https://iiif.ub.uni-leipzig.de/000000002/manifest.json>

<https://digital.ub.uni-leipzig.de/object/viewid/0000000002>

Codex Vaticanus

[https://digi.vatlib.it/iiif/MSS\\_Vat.gr.1209/manifest.json](https://digi.vatlib.it/iiif/MSS_Vat.gr.1209/manifest.json)

[https://digi.vatlib.it/view/MSS\\_Vat.gr.1209/0001](https://digi.vatlib.it/view/MSS_Vat.gr.1209/0001)

Close

Filter objects: Add new object from URL:  Load

Festschrift zum fünfhundertjährigen Geburtstage von  
Johann Gutenberg

Leipzig University Library

566 items



...



Die Krankheiten der Leber

Leipzig University Library

858 items



...



Nasen-, Rachen- und Kehlkopfkrankheiten

Leipzig University Library

448 items



...



Die Termiten oder weißen Ameisen

Leipzig University Library

226 items



...



Die Gicht

Leipzig University Library

310 items



...



Die Nervenkrankheiten nach Unfällen



1. <https://iiif.ub.uni-leipzig.de/0000000002/manifest.json>
2. [https://digi.vatlib.it/iiif/MSS\\_Vat.gr.1209/manifest.json](https://digi.vatlib.it/iiif/MSS_Vat.gr.1209/manifest.json)

Filter objects:

Add new object from URL:  http://... ↗

Load



Festschrift zum fünfhundertjährigen Geburtstage von  
Johann Gutenberg

Leipzig University Library

566 items



...



Die Krankheiten der Leber

Leipzig University Library

858 items



...



Nasen-, Rachen- und Kehlkopfkrankheiten

Leipzig University Library

448 items



...



Die Termiten oder weißen Ameisen

Leipzig University Library

226 items



...



Die Gicht

Leipzig University Library

310 items



...



Die Nervenkrankheiten nach Unfällen



Close

Filter objects: Add new object from URL:  

Codex Sinaiticus

86 items



...



Vat.gr.1209

1555 items



...

Festschrift zum fünfhundertjährigen Geburtstage von  
Johann Gutenberg

566 items



...



Die Krankheiten der Leber

858 items



...



Die Gicht

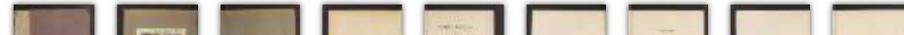
310 items



...



Nasen-, Rachen- und Kehlkopfkrankheiten



## Codex Sinaiticus

Replace Object

Add Slot Right

Add Slot Left

Add Slot Above

Add Slot Below

Buch Klagelieder



**Codex Sinaiticus**

Buch Chronik

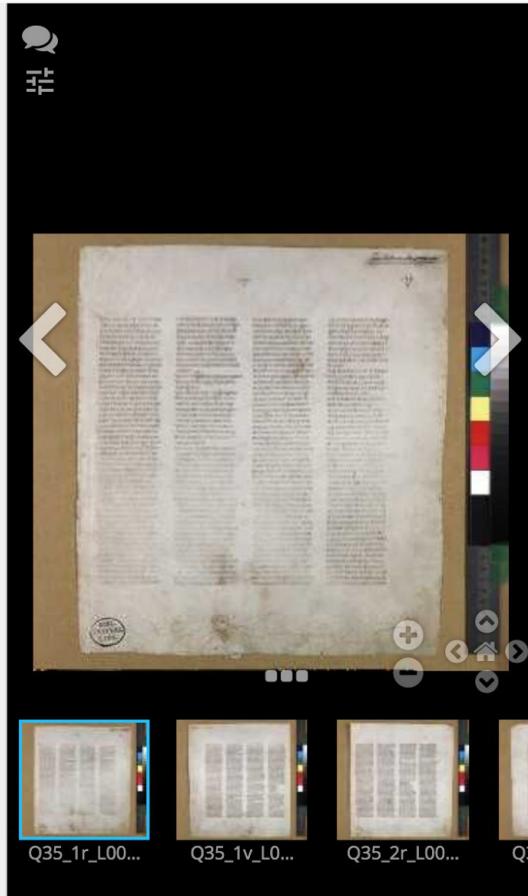
Buch Esra

Buch Ester

Buch Tobit

Buch Jeremia

Buch Klagelieder



Close



Add Item

## Codex Sinaiticus

Buch Chronik

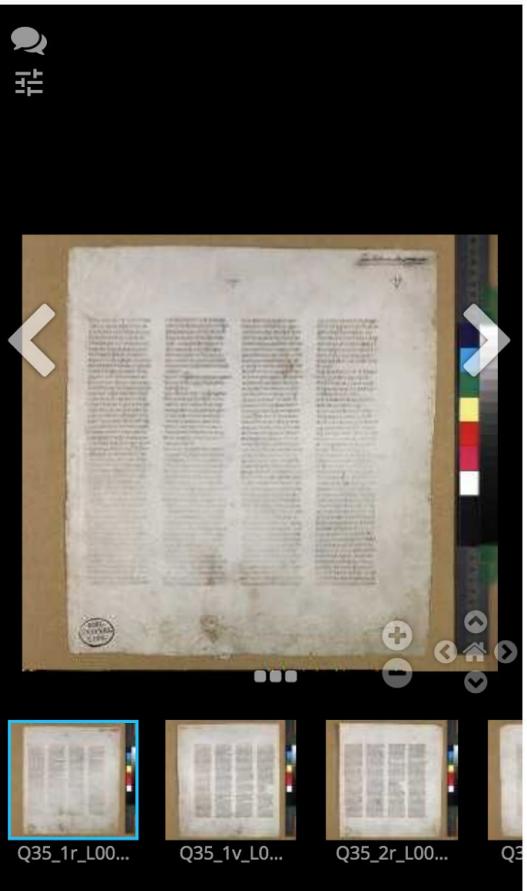
Buch Esra

Buch Ester

Buch Tobit

Buch Jeremia

Buch Klagelieder



## Vat.gr.1209

p. III Codicis index

p. IV Veteris Testamenti librorum  
divisio secundum s. Hieronymum

p. 1-46 Genesis

p. 47-99 Exodus

p. 99-137 Leviticus

p. 138-191 Numeri

p. 191-238 Deuteronomium

p. 238-270 Iosue

p. 271-304 Iudicum

p. 304-309 Ruth

► p. 309-394 Samuelis I-II

► p. 395-484 Regum I-II

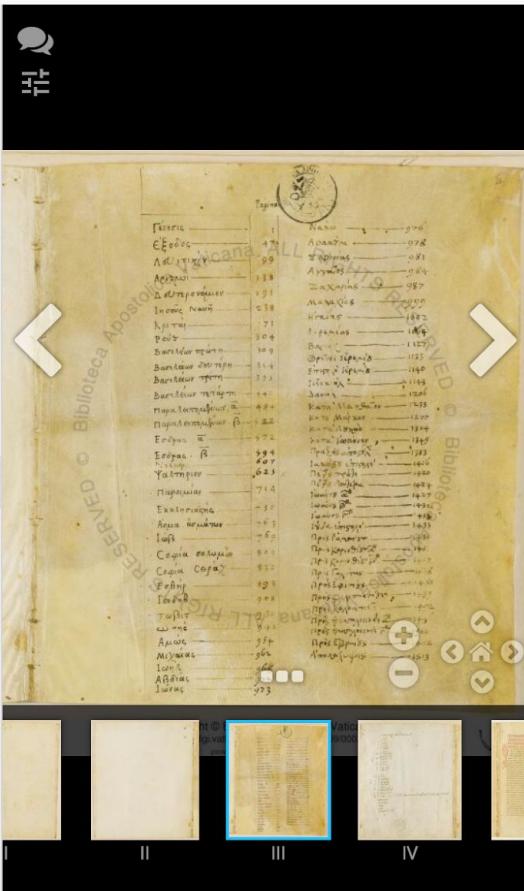
► p. 484-572 Paralipomenon I-II

p. 572-594 Esdrae III

A digital image of an open manuscript page from Vat.gr.1209, specifically page III. The page contains a list of book titles and their corresponding page numbers. The list is as follows:

Book	Page Number
Genesis	1
Exodus	47
Leviticus	99
Numeri	133
Deuteronomium	191
Joshua	238
Kings	71
Books	304
Baruch before Ezra	309
Baruch after Ezra	314
Baruch apocrypha	372
Baruch epiphany	374
Baruch ascension	494
Paralipomenon (I)	522
Paralipomenon (II)	523
Ezra B	572
Nehemiah	573
Esther	623
Baruch	714
Exhortation	750
Letter of Aristeas	762
Letter of Jeremiah	763
Letter of the Priests	764
Letter of the Priests	765
Letter of the Priests	766
Letter of the Priests	767
Letter of the Priests	768
Letter of the Priests	769
Letter of the Priests	770
Letter of the Priests	771
Letter of the Priests	772
Letter of the Priests	773

The page is marked with a large circular stamp in the upper right corner. The manuscript is shown in its entirety, with pages II, III, and IV visible at the bottom.



**Codex Sinaiticus**

Buch Chronik

Buch Esra

Buch Ester

Buch Tobit

Buch Jeremia

Buch Klagelieder

**Vat.gr.1209**

p. 484-572 Paralipomenon I-II

p. 572-594 Esdrae III

p. 594-624 Esdrae II. Septuaginta

p. 625-713 Psalmi

p. 714-749 Proverbia

p. 750-762 Ecclesiastes

p. 763-769 Canticum canticorum

p. 769-809 lob

p. 809-832 Sapientia

▼ p. 832-893 *Ecclesiaticus, praemisso prologo.*

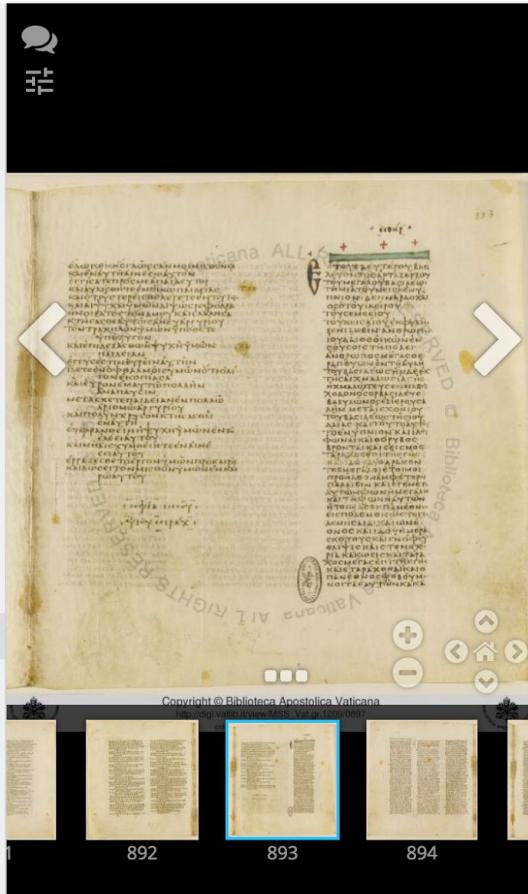
p. 832-833 Ecclesiastici prologus

p. 833-893 Ecclesiasticus

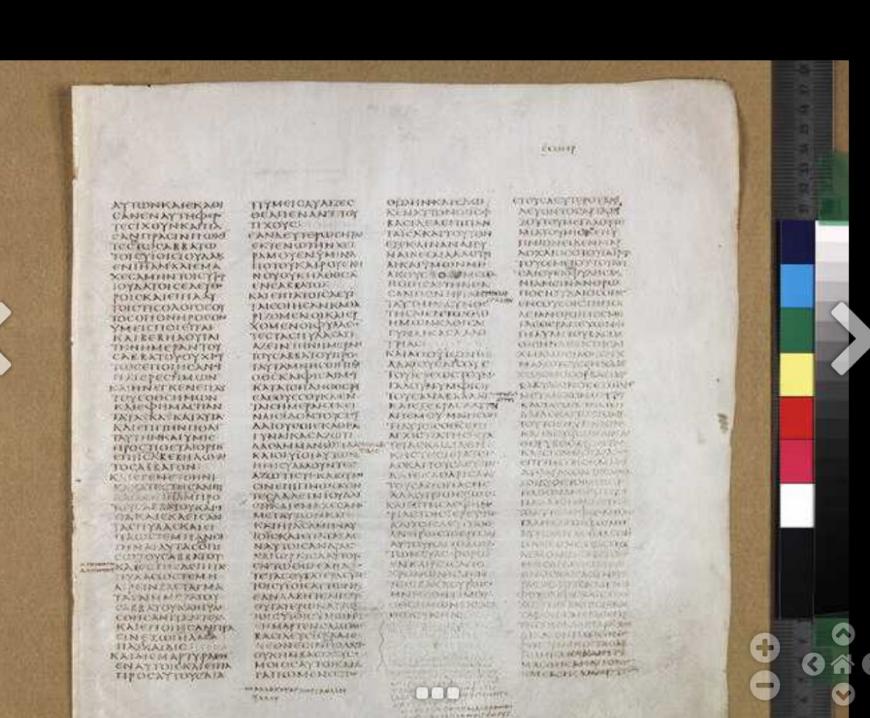
p. 893-907 Esther

p. 908-930 Iudith

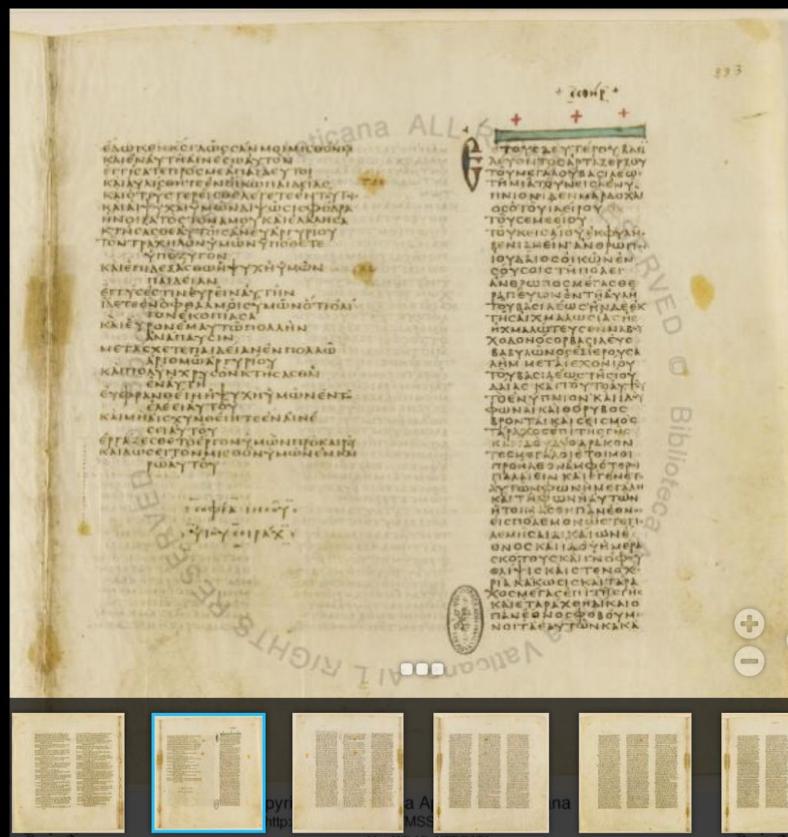
p. 930-944 Tobias



## Codex Sinaiticus



## Vat.gr.1209



## x ■ □ ≡ Codex Sinaiticus

≡

## x ■ □ ≡ Vat.gr.1209

≡

Ἐσοντ̄

ετούσδε γέτερού βλ̄ι,  
λεγόντος αρταζ̄  
ζού τού μεγάλου γρ̄  
μιατού γνίσκεντ̄  
πνιονείδεν μαρ  
δοχλιός ο τού γίκιτ̄  
τού σεμείου τού κει

τούσδε γέτερού βλ̄ι  
λεγόντος αρταζ̄ ερζού  
τού μεγάλου γρ̄ βασιλέως  
τάμιατού γνεισλένγ̄  
πνιονίδεν μαρδοχαὶ



Q36\_4v\_L01...

Q36\_5r\_L01...

Q36\_5v\_L01...

Q36\_6r\_L01...

Q36\_6v\_L01...

Q36\_7r\_L01...

892

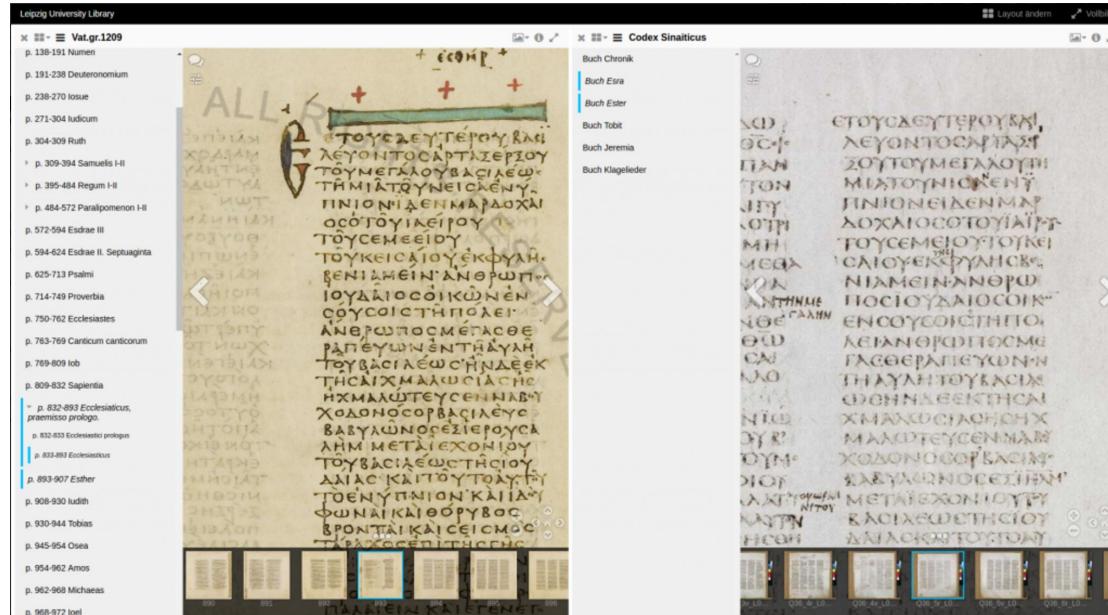
893

894

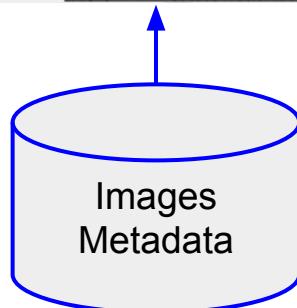
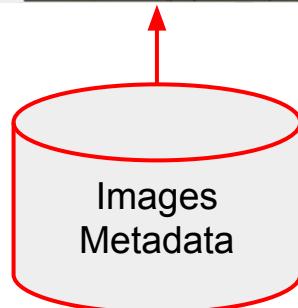
895

896

897



Vatikanische  
Bibliothek



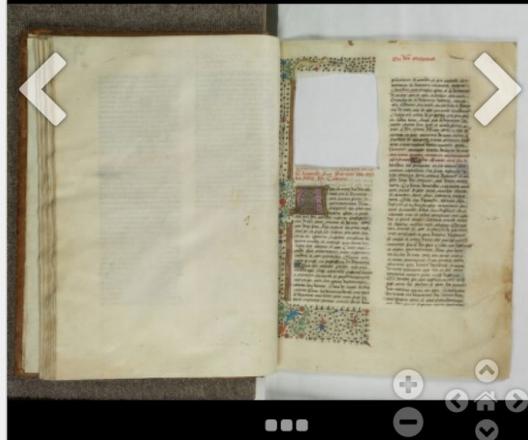
UNIVERSITÄTS  
BIBLIOTHEK  
*ubl* LEIPZIG

# Demo Mirador / Biblissima

[http://projectmirador.org/demo/advanced\\_features.html](http://projectmirador.org/demo/advanced_features.html)

**x Reconstructed manifest (partial): Grandes Ch...****Index**    **Suche**    **Ebenen**

Kein Inhaltsverzeichnis verfügbar



f. 033v - 034



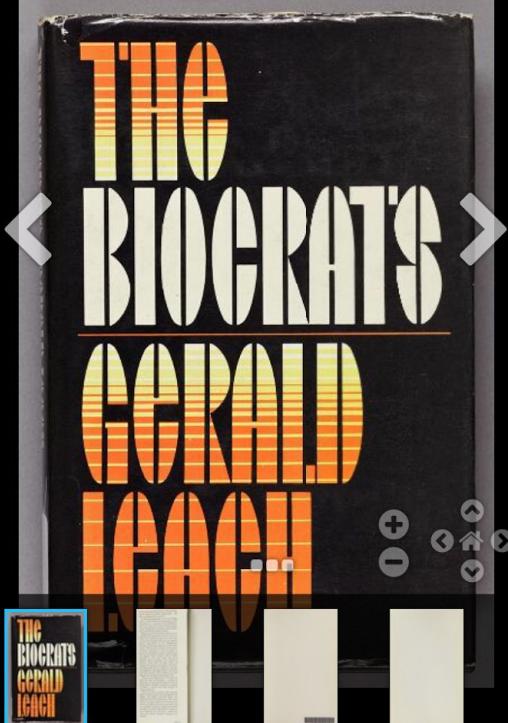
f. 034v - 035



f. 045v

**x The biocrats****Index**    **Suche**    **Ebenen****Front Cover**

- Title Page
- Table of Contents
- Back Cover



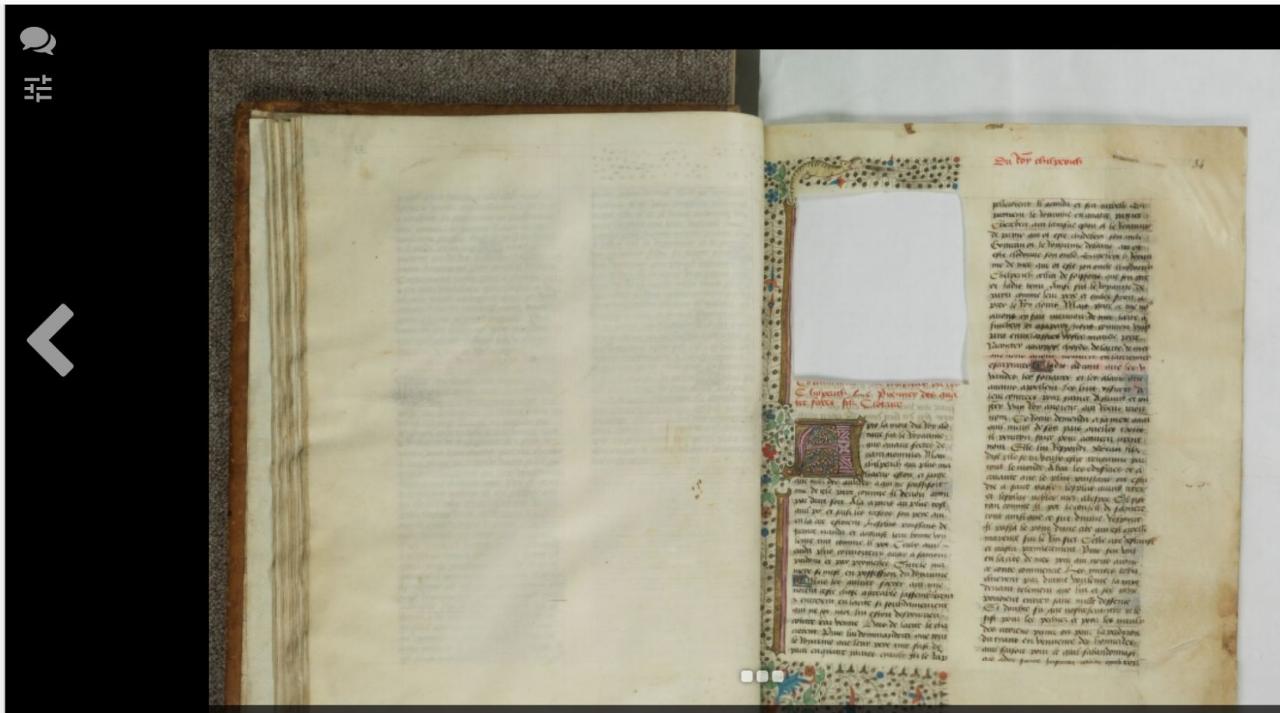
## ☰ Reconstructed manifest (partial): Grandes Chroniques de France (Châteauroux, BM, ms 5)

Index

Suche

Ebenen

Kein Inhaltsverzeichnis verfügbar

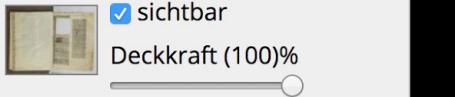


## Reconstructed manifest (partial): Grandes Chroniques de France (Châteauroux, BM, ms 5)

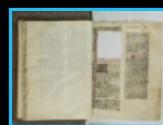
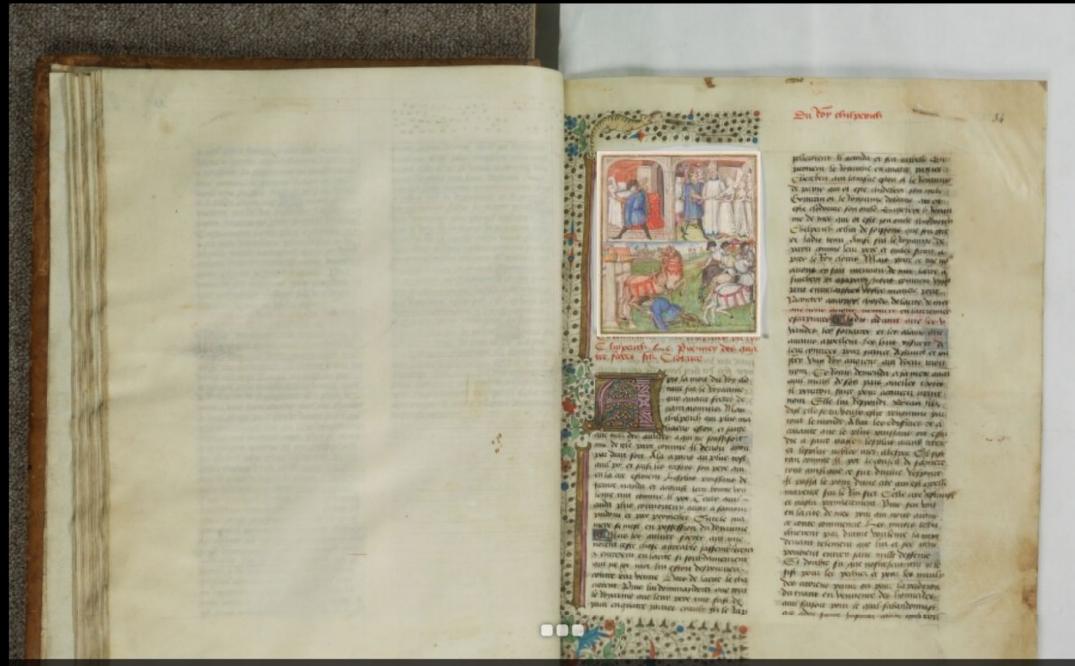
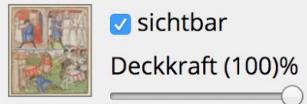
Index Suche Ebenen

Bilder für f. 033v - 034

Kein Label



Kein Label



f. 033v - 034

f. 034v - 035

f. 045v - 046

f. 046v - 047

f. 053v - 054

f. 054v - 055

f. 067v - 068



## ☰ Reconstructed manifest (partial): Grandes Chroniques de France (Châteauroux, BM, ms 5)

[Index](#) [Suche](#) [Ebenen](#)

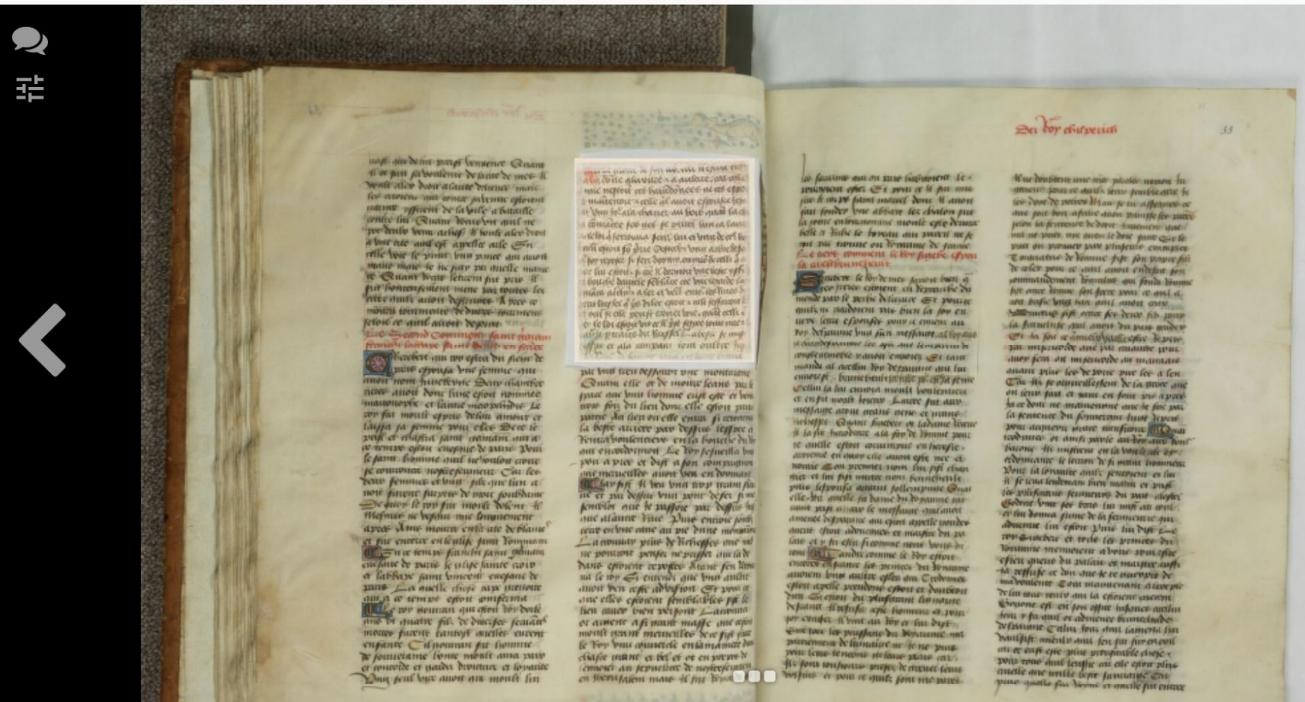
Bilder für f. 034v - 035

Kein Label

sichtbar  
Deckkraft (100%)

Kein Label

sichtbar  
Deckkraft (100%)



f. 033v - 034

f. 034v - 035

f. 045v - 046

f. 046v - 047

f. 053v - 054

f. 054v - 055

f. 067v - 068

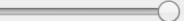


## ☰ Reconstructed manifest (partial): Grandes Chroniques de France (Châteauroux, BM, ms 5)

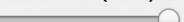
[Index](#) [Suche](#) [Ebenen](#)

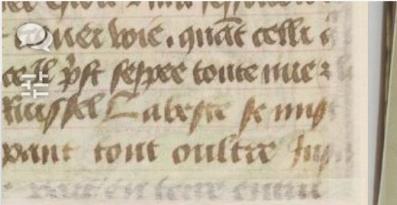
Bilder für f. 034v - 035

Kein Label

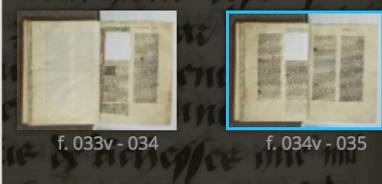
  sichtbar  
Deckkraft (100%) 

Kein Label

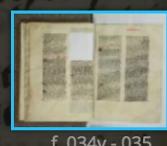
  sichtbar  
Deckkraft (100%) 



Quer boie, quac celle  
ce p̄t rep̄ee toute mez  
fuske. L'aleſte fe my  
vant tout oultre fu  
... et tenu en



f. 033v - 034



f. 034v - 035



f. 045v - 046



f. 046v - 047



f. 053v - 054



f. 054v - 055

quis ne gardoient pas bien la for en  
ueve leue espoſſes pour ce emouu au  
roy desprume bns ſien messaute al koy auo  
it chace desprame lez oſſe me lempereur de  
conſtantmoble y auoit emuoiez Et tant  
manda al accellu for desprume qui lui  
emuoiaſt bameſtient ſa ſalle po effaſe ſentie  
Cellu ſa lui emuoia moult boniencere  
et en fait moult loienx. L'are fut aux  
messaute atout grāne genē et māne  
richesse. Quant ſigebert et ladame ſerue  
il la fit introdure ala for de l'omme pour  
te quelle estoit corrumpte en heresie.  
arrieme en mons elle auoit eſſe nee et  
nourrie. Son premer nom lui fut chan  
tier et lui p̄t mettre nom bameſtient  
puis leſponſa arant ſollempté. Quant  
elle dit quelle ſa dame du

ſicut  
la franchiſe  
Et ta ſoit a  
par miſcru  
moſt ſeat on  
anant plue  
Car ilz ſe or  
on ſeuſ ſt  
ta ce donc ne  
la ſentence d  
pour achier  
traduire et  
barone il n  
ordomance le  
Pouſ ſa loau  
il ſe gen a de  
les plusfame



f. 067v - 068

l'omme men

# Reconstructed manifest (partial): Grandes Chroniques de France, BM, ms 5

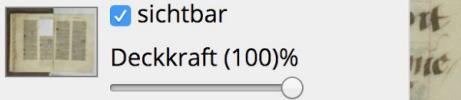
Randfarbe wählen



Index | Suche | Ebenen

Bilder für f. 034v - 035

Kein Label

 sichtbar

Deckkraft (100)%

Kein Label

 sichtbar

Deckkraft (100)%

maistre noistz... vng so ala matice an vng quic la ch  
conciate ses geet se pturet sun ca lant  
vng so ala matice an vng quic la ch  
mest estoit so due desoubz vng autre depe  
soy reposez si sen dormy. ourno de celle a  
ce lui estoit. si coe il dormo  
bouche dantele feblace co  
mara aethr a lez et vele  
etit hyske q' ne diley estoit  
out se elle peult trouer  
le soi estoit vnt ce il pte  
au la ptraus du hyske  
vng et ala ram pant to

part vng treu dessoubz vne montaigne  
Quant elle ot de monte leane part

f. 033v - 034      f. 034v - 035      f. 045v - 046      f. 046v - 047      f. 053v - 054      f. 054v - 055      f. 067v - 068

B I ☰ 🔍
T
P

**Important Annotation**

Powered by TinyHCE

Add tags here...

© Abbrechen ☰ Speichern

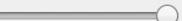
## ☰ Reconstructed manifest (partial): Grandes Chroniques de France (Châteauroux, BM, ms 5)



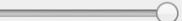
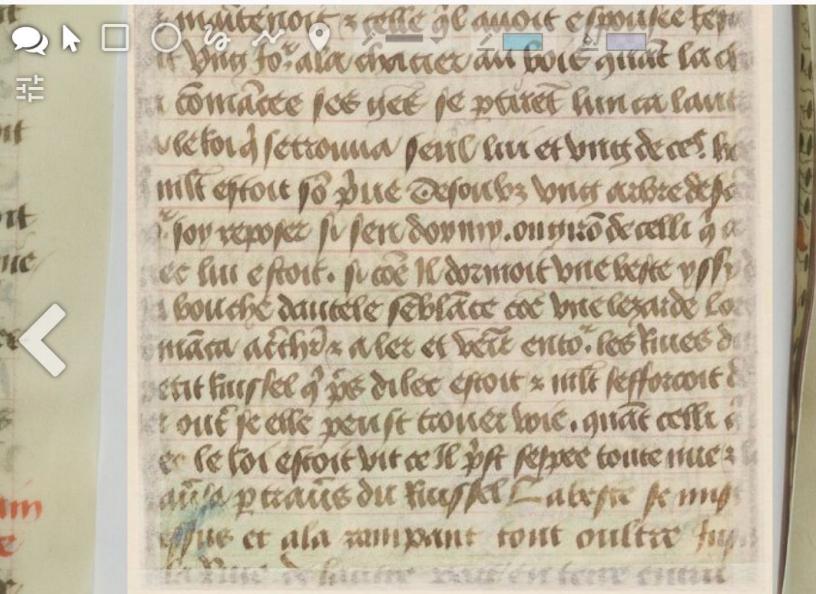
Index Suche Ebenen

Bilder für f. 034v - 035

Kein Label

  sichtbar  
Deckkraft (100%) 

Kein Label

  sichtbar  
Deckkraft (100%) 


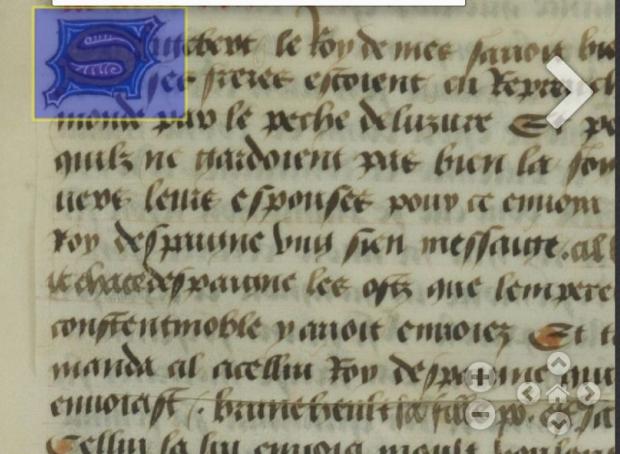
f. 033v - 034

f. 034v - 035

f. 045v - 046

f. 046v - 047

Fentz bouslenciers en la bousle du



f. 053v - 054

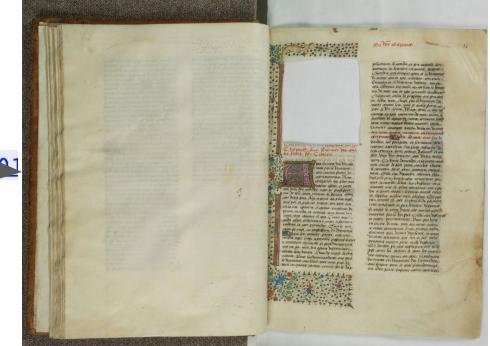
f. 054v - 055

f. 067v - 068

```

- images: [
  - {
    @type: "oa:Annotation",
    motivation: "sc:painting",
    - resource: {
      @id: "http://iiif.irht.cnrs.fr/iiif/Châteauroux/B360446201\_MS0005/jp2/B360446201\_MS0005\_0038/full/full/0/default.jpg",
      @type: "dctypes:Image",
      format: "image/jpeg",
      height: 5412,
      width: 7216,
      - service: {
        @context: "http://iiif.io/api/image/2/context.json",
        @id: "http://iiif.irht.cnrs.fr/iiif/Châteauroux/B360446201\_MS0005/jp2/B360446201\_MS0005\_0038/full/full/0/default.json",
        profile: "http://iiif.io/api/image/2/level2.json"
      }
    },
    on: "http://bvmm.irht.cnrs.fr/iiif/2309/canvas/981394"
  },
  - {
    @type: "oa:Annotation",
    motivation: "sc:painting",
    - resource: {
      @id: "http://gallica.bnf.fr/iiif/ark:/12148/btv1b10511139b/f1/full/full/0/native.jpg",
      format: "image/jpeg",
      @type: "dctypes:Image",
      width: 2138,
      height: 2414,
      - service: {
        @context: "http://library.stanford.edu/iiif/image-api/1.1/context.json",
        profile: "http://library.stanford.edu/iiif/image-api/1.1/compliance.html#level2",
        @id: "http://gallica.bnf.fr/iiif/ark:/12148/btv1b10511139b/f1"
      }
    },
    on: "http://bvmm.irht.cnrs.fr/iiif/2309/canvas/981394#xywh=3949,994,1091,1232"
  }
]

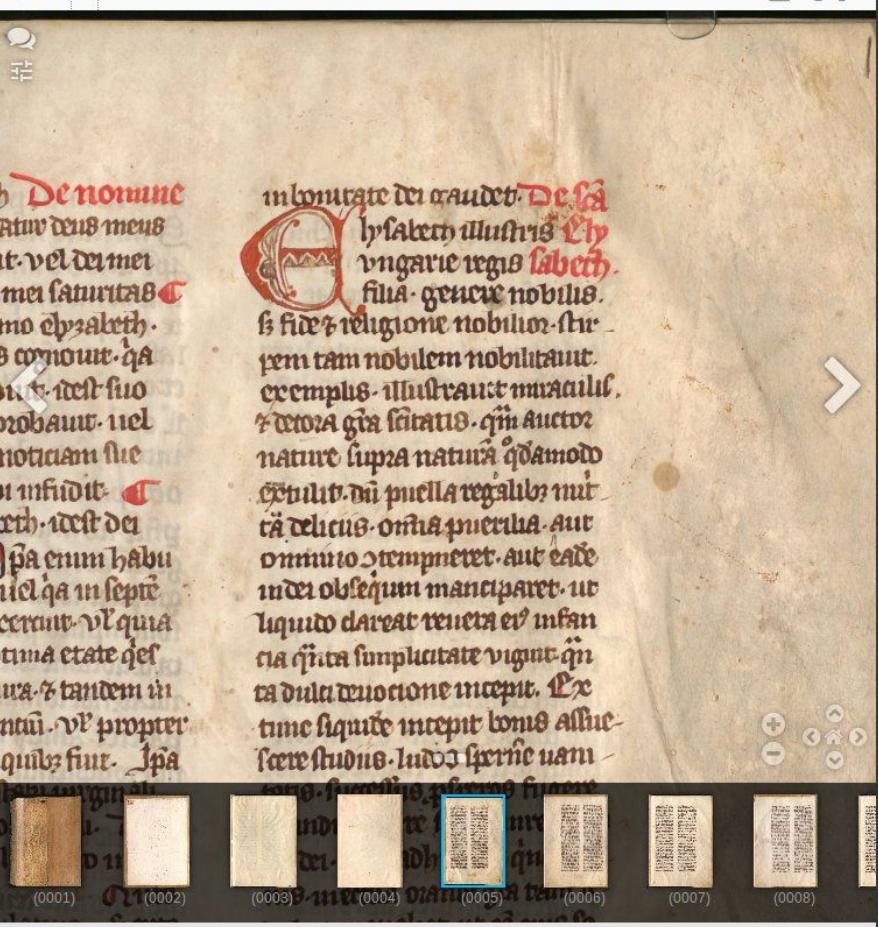
```




# Handschriftenkurs der UB Leipzig 2017

- Virtuelle Arbeitsumgebung
- Bindet Handschriftendigitalisate unterschiedlicher Einrichtungen in eine Oberfläche ein
- ermöglicht Annotationen zur Dokumentation wissenschaftlicher Arbeit
- basierend auf der Software mirador@sul (Stanford University Libraries)  
[https://github.com/sul-dlss/mirador\\_sul](https://github.com/sul-dlss/mirador_sul)

## Jacobus, de Voragine: Jacobi de Voragine Legenda aurea ...



## Leipzig, Universitätsbibliothek Leipzig, Ms 1353

ESOPHIS OTIAS  
Autem elenchis t. de his qui uid  
tur elenchi. sunc autem palo  
glimi sit non elenchi dicimus. Inapientes s  
naturam a primis qm qm alii quid sunt salli  
ali cum no snt uidetur manifestum e. Pa  
quemadmodum t. m. aliis hoc sic p. quicad sunt  
dñe sic t. m. o. m. se he. t. n. h. t. t.  
tent bene. Alii autem uidetur trib  
flanti t. singenti. Q. pulchri quid  
Dorem. ali autem uidetur rogentes sest  
animatis ut b. simb. Ram t. horu h. quidem  
Organtem illud uero auem est  
ha autem no sic quidem uidetur aut sed in  
scendum ne liturgia autem t. ma quea angusta

Vorderdeckel Vorderspiele 1r 1v 2r 2v 3r 3v

Bearbeiten Löschen einsteckiges "a"

# privates Projekt

<https://manducus.net>



Sammelt hochauflösende GLAM-Bilder  
unter freien Lizenzen von Wikimedia Commons  
und macht sie unter IIIF verfügbar.  
Nutzt den SPARQL-Endpunkt von Wikidata.

## Museums / Galleries

British Museum  
National Gallery of Art  
The J. Paul Getty Trust  
The Walters Art Museum  
Yale Center for British Art  
Et al.

## Aggregators

ARTstor  
CONTENTdm  
DPLA  
Europeana  
Internet Archive  
Wikimedia Foundation

## State / National Libraries

Austria  
Bavarian State Library  
British Library  
China  
Egypt  
France  
Israel  
Italy  
New Zealand  
Norway  
Poland  
Scotland  
Serbia  
Wales  
Qatar  
United States (LoC)  
Vatican

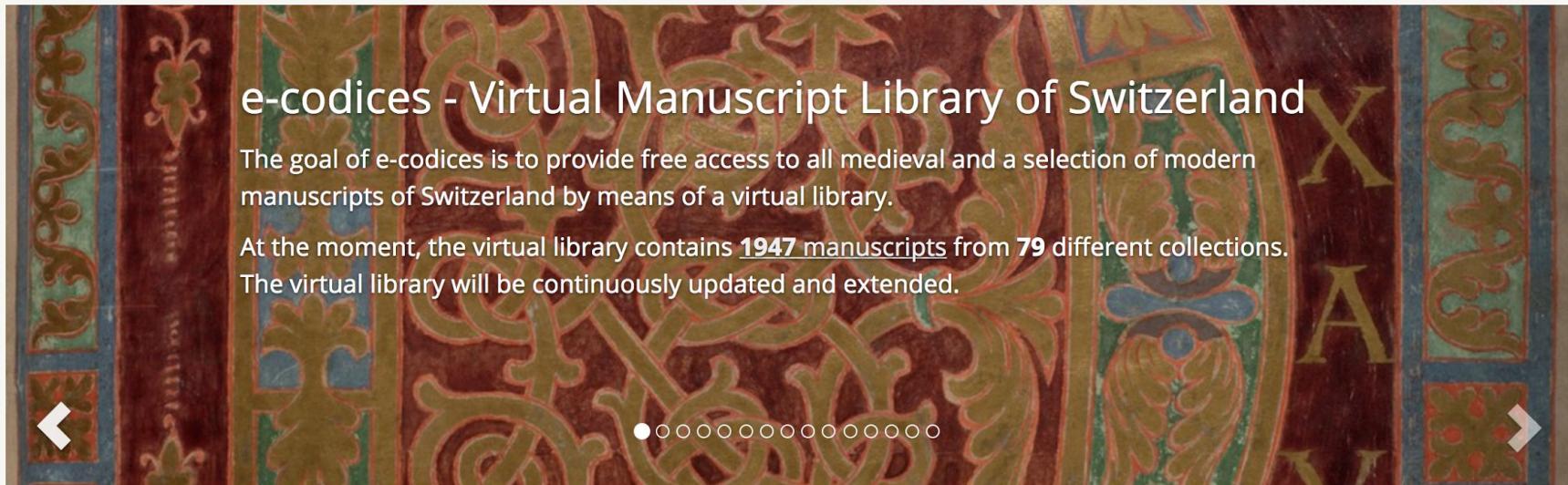
## Universities and Research Institutions

Cambridge  
Cornell  
Ghent  
Johns Hopkins  
Harvard  
Oxford  
Princeton  
Stanford  
Edinburgh  
Toronto  
Wellcome Trust  
Yale

# Interessante IIIF-Quelle — eine zufällige Auswahl

more: <http://iiif.io/community/#participating-institutions>

And many more!



# e-codices - Virtual Manuscript Library of Switzerland

The goal of e-codices is to provide free access to all medieval and a selection of modern manuscripts of Switzerland by means of a virtual library.

At the moment, the virtual library contains **1947 manuscripts** from **79 different collections**.  
The virtual library will be continuously updated and extended.



## Collections

### Swiss Collections

#### Location, Library / Collection

#### Documents

[All Libraries and Collections](#)**1947**[Aarau, Aargauer Kantonsbibliothek](#)

18

[Aarau, Staatsarchiv Aargau](#)

7

[Appenzell, Landesarchiv Appenzell Innerrhoden](#)

5

[Basel, Pharmazie-Historisches Museum der Universität Basel](#)

9

## News

Latest Manuscripts:

[12/14/2017](#)

Newsletters from the past:

- [Issue 31](#), December 2017
- [Issue 30](#), October 2017
- [Issue 29](#), June 2017
- [Issue 28](#), March 2017
- [Issue 27](#), December 2016
- [Issue 26](#), November 2016

# e-codices – Virtual Manuscript Library of Switzerland

Website: <http://www.e-codices.unifr.ch/>

Endpoint: <http://www.e-codices.unifr.ch/metadata/iiif/>

Collections: <http://www.e-codices.unifr.ch/metadata/iiif/collection.json>

Manifeste: 1500

Images: 590,840

# Wellcome Library

Website: <http://wellcomelibrary.org>

Endpoint: <https://wellcomelibrary.org/iiif>

Collections: <https://wellcomelibrary.org/service/collections/>

Manifests: 150,000

Images: 27,000,000



# Zukünftige Entwicklung der IIIF APIs

- IIIF AV und Presentation API 3.0
  - Wechsel von Open Annotation Data Model zum W3C Web Annotation Data Model
  - Unterstützung von Videoquellen

# Institutionell gesehen

- Umsetzung der Open Digitization Policy
  - Verfügbarmachung aller dafür geeigneten Digitalisate
    - unter CC0 bzw. CC-PD-Mark
    - IIIF-kompatibel
- Werkstatt-Schaufenster: <https://digital.ub.uni-leipzig.de>

Der Kultur – Hackathon

III F Workshop

# { COD1NG } DA V1NC1

OST 2018

Leipzig

Auftakt  
**14. / 15.  
APRIL**

---

Preisverleihung  
**16. JUNI  
2018**

<https://codingdavinci.de/events/ost>

UNIVERSITÄT  
LEIPZIG

UNIVERSITÄTS  
BIBLIOTHEK *ubl* LEIPZIG

{ IDE for Leipzig

I/D IFDT Institut für  
Digitale Technologien

Gründer



OPEN  
KNOWLEDGE  
FOUNDATION  
DEUTSCHLAND

dig:IS Servicestelle  
Digitalisierung

WIKIMEDIA  
DEUTSCHLAND

# Danke!

Leander Seige

@mjkls

seige@ub.uni-leipzig.de

<http://iiif.io>



ЗЧСЗ:  
БИШАТЫ!