

# READ

RECOGNITION & ENRICHMENT  
OF ARCHIVAL DOCUMENTS

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## D8.13

### Large Scale Demonstrators - Venice Time Machine

Meta-learning model

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EPFL

Distribution: <http://read.transkribus.eu/>

READ  
H2020 Project 674943

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## 1. Executive summary

The Venice Time Machine (VTM) project aims at building a multidimensional model of Venice and its evolution covering a period of more than 1000 years. The State Archives of Venice possesses an estimated 80 km of shelves that are filled with administrative documents, from birth registrations, death certificates and tax statements, all the way to maps and urban planning designs. These archives are currently being digitized, transcribed and indexed, setting the base of the largest database ever created on Venetian documents.

The Venice Time Machine project wants to give the archives a new, virtual existence on the Web through Cloud access and online tools. It aims to reanimate Venice's past life from them by re-creating social networks and family trees, and visualizing urban development and design.

As one of the four large scale demonstrators of the READ project, the objective is to provide an environment to test and use the technologies developed within the READ consortium on large real-world data and to develop new solutions to deal with large historical archive indexing and retrieval.

## 2. Main contributions

The contributions of EPFL group to the READ project are divided in three sections :

- Design on the Venice Time Machine (April to September) : Laurent Bolli and Gaël Paccard
- Design on Transkribus (April to September) : Laurent Bolli
- Text recognition on cadasters and documents (since October) : Sofia Ares Oliveira

### 2.1. Design Large Scale Demonstrator - Venice Time Machine

#### 2.1.1. General aspects

Our role has been to develop an interface capable of displaying events extracted out of historical sources in a spatio-temporal visualization, covering 1000 years of history of Venice. Such interface is at the crossroad of several technical developments, from 3D + time global grid system to 2D sources explorer and 3D modeling.

After an intensive search phase, including interviews of developers and researchers at the lab but also stakeholders of Venice State Archives, mapping of functionalities and wireframing, we divided the interface into five main components.

#### 2.1.2. Mentions Search Interface

This component allows the user to search for all “mention” existing in the database, i.e. all identified entities in a source. Mentions are displayed in a N-graph representation and the sources in which the mention are found are displayed in a thumbnail with a link to the source explorer interface.



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See appendix :

- A. Large Scale Demonstrator GUI, page 13 to 15
- B. Large Scale Demonstrator Search

### **2.1.3. Entity's events timeline**

Entities (names, places, objects, etc.) are defined by mentions found in primary sources citing them, called “events”, thus giving the backbone to describe and place in a timeline each entity. Each entity is a collection of time based events, linked to the sources. Each event has a different duration in time based on date of document or specific time information found in the source. The capability of being able to compare entities trajectories, both in time and space has then been solved by a system of cards in which each entity is displayed in a different color.

See appendix :

- A. Large Scale Demonstrator GUI, page 16 to 18

### **2.1.4. Sequencer**

The sequencer is a timeline in which pre-selected entities (from the search interface) are displayed. Entities are represented by boxes in which the events are represented by lines of various length showing the duration of the event (in green). The user can move the timeline, zooming in and out, to see which entities (events) are occurring at the same time. Each event crossed by the current time (in the example 1578), is displayed in the map, thus showing not only what occurred at the same time but where, as long as the information is available. The sequencer is also a way of keeping track of users searches, by keeping all entities found in a vertical viewer at the left side of the window.

See appendix :

- A. Large Scale Demonstrator GUI, page 19 to 21

### **2.1.5. Isometric map with layers of sources**

Events of selected entities are positioned on a pre-calculated isometric map to enhance online performances. This map is made of 3D cloud of dots, based on a global grid and geometrically aligned on Earth coordinates. It allows to deal with the scarcity of 3D information, which can vary a lot according to the level of knowledge available. For example, we have very detailed information about the Rialto bridge so the system can zoom in very close in the bridge location but at the same time, the rest of the neighbourhood, which is not as detailed will remain blurred. The map can also be compared at different time by using a slider. When no information about the building is available (early ages of Venice), the map shows only the boundary limits in 2D.

See appendix :

- A. Large Scale Demonstrator GUI, page 17 to 18

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## 2.2. Design Transkribus

### 2.2.1. General aspects

Our role has been to follow the development of READ interface components from a user point of view. This includes the definition and representation of Persona, the development of wireframe to organise and streamline informations and functionalities of the different interfaces and the full design of web interfaces.

We have also participated to workshop sessions with engineers in charge of the development of such interfaces representing the perspective of user experience (UX) and providing best practices consulting to developers and managers.

### 2.2.2. Persona

We have been working on the definition of Persona based on interviews, survey of similar projects (Australian newspaper and collaborations with NAF and ABP) and previous workshops conducted before our implication in READ. The result is a structured document, presenting the Persona on which a consensus has been adopted, which serves as a decision tool when action must be taken on functionalities development and interface organisation. Deliverables are in the form of Powerpoint editable files.

See appendix:

- C. Transkribus Persona

### 2.2.3. Transkribus expert interface

For the professional desktop interface, our role has been to develop a new GUI based on current version of Transkribus software. The result is a compiled on a document that describes all the main components of the interface: menu, toolbar, contextual windows and behaviour. This document serves as a base for future evolution of Transkribus expert interface.

See appendix:

- D. Transkribus Expert New GUI

### 2.2.4. Transkribus online interface

For the online version of Transkribus, we've develop separated widgets for specific purposes:

- search and correct widget - various propositions from simple to more complex based on Persona
- e-learning widget
- proof-reading widget
- crowd sourcing widget and proposition for user profiling

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See appendix:

- E. Transkribus Online Widget - version 1,
- F. Transkribus Online Widget - version 2,
- G. Transkribus Online New GUI

All these widget were meant to be integrated in the online version of Transkribus and have been thoroughly discussed with the engineer team. Deliverables are in the form of a PDF document and Adobe Illustrator files.

### **2.2.5. Transkribus landing page website**

Our contribution has been to redefine Transkribus home page, presenting the Persona in a less formal manner, a new menu giving access to the whole set of interfaces, an access to the collection and document manager page and the access to the installation and WIKI page of the project. Deliverables are in the form of a PDF for presentation and Adobe files for development.

See appendix:

- H. Interface Landing Page Dashboard

### **2.2.6. Miscellaneous**

We have also developed a visualisation of Transkribus ecosystem to help the communication of the project internally by giving a simple yet complete visual representation mapping all interfaces and connected services of READ.

See appendix:

- I. Transkribus Interface Map

## **2.3. Handwritten label recognition and parcel segmentation on venitian cadaster maps**

Cadaster plans are cornerstones for reconstructing dense representations of the history of the city [1]. They provide information about the city urban shape, enabling to reconstruct footprints of most important urban components (buildings, streets, canals, bridges) as well as information about the urban population and city functions (census information, property, rent prices, etc.) [2].

Cadasters are a powerful way to link different types of items and information. Because they contain both spatial and textual information, the establishment of a processing pipeline for interpreting them remains extremely challenging.

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### 2.3.1. Overview

Our group implemented a fully automated process capable of segmenting and interpreting Napoleonic cadaster maps of the Veneto region dating from the beginning of the 19th century. The system extract the geometry of each of the drawn parcels, classifies, reads and interprets the handwritten labels. An overview of the system can be seen in Fig. 1.

Such process makes cadaster maps searchable, allowing for example to locate a given label within a map, and also helps the georeferencing process. By integrating this work in a larger system, it is possible to link the mention of an owner with all its landholdings and show the corresponding regions on the maps, or vice versa by selecting a region, its owner can be directly retrieved. The proposed approach is a great step towards an easier, more efficient and more interactive study of these documents.

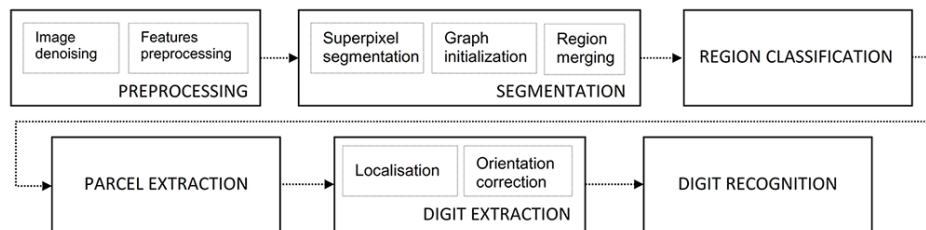


Figure 1: Overview of the system

### 2.3.2. Cadaster segmentation

To extract the desired information from the document, a graph-based segmentation approach is adopted, which models the image as a weighted undirected graph. This allows to process the pixels in the spatial domain of the image but also to use higher level information such as connections, similarities and dependencies between the elements.

A graph is a mathematical structure composed of vertices and edges, representing a system of connections or interrelations among a set of objects. In our case, the graph representing the image is initialized with superpixels (Simple Linear Iterative Clustering (SLIC) method [3]) as vertices and the edges connect neighbouring vertices (superpixels). Each edge has a weight which is a measure of the dissimilarity between neighbouring elements.

Homogeneous regions are found by grouping similar superpixels and merging the corresponding graph vertices. Our approach uses global homogeneity, meaning that the method minimizes intragroup dissimilarity and maximizes intergroup dissimilarity. The “dispersion” of edge weights (i.e standard deviation within a region) allows to spot high weighted edges within a group and thus disconnect dissimilar vertices to end up with independent homogeneous regions.

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### 2.3.3. Parcel extraction

The merged regions are then classified to identify possible parcel candidates. The classification uses a Support Vector Machine (SVM) classifier trained on manually annotated samples of maps coming from the Napoleonic cadaster of Venice.

To obtain the parcels, we apply a flood fill algorithm on each parcel candidate. Starting from one point within the candidate region (seed point), the flood fill algorithm floods the “flat” zone and stops at the boundaries (previously defined by a ridge detector).

The parcels are finally extracted as polygonal shapes, and their corners’ points are saved in GeoJSON format to allow further integration of parcels in geographic information systems (GIS).

### 2.3.4. Label extraction and recognition

The parcel’s handwritten label is a unique identifier which allows to match each property to its owner, and is of great interest for named-entities study for instance.

The recognition of the label is done in two steps. First, elements classified as text regions are localised, delimited by bounding boxes and grouped so that neighbouring characters are extracted together. The segmented parcels are used to refine the localisation, since the label is usually contained within the parcel. The identifiers’ boxes are rotated to be horizontally oriented since the digit recognition step requires horizontally oriented digits to output accurate predictions.

Then, the horizontally oriented numbers are separated into digits that are processed individually. A good digit segmentation is primordial since connected or overlapping digits lead to incorrect recognition. A simple Convolutional Neural Network (CNN) composed of two convolutional layers, one fully-connected layer and a final softmax layer is used to predict the identifiers. It is trained on MNIST dataset [4] and fine-tuned with digit samples from *Sommarioni* register and performs with an accuracy of 0.9895 on MNIST dataset and 0.9413 on the fine-tuned dataset. The CNN outputs the predicted number with a confidence level, which indicates the reliability of the result.

### 2.3.5. Results

The proposed approach shows promising results in parcel extraction and identifiers recognition. On the first “proof-of-concept” tests, we were able to extract most parcels and identifiers correctly (more than 85%), which confirmed the feasibility of their automatic extraction. According to Fig. 3a, almost 30% of extracted elements are not parcels (false positives), this rate can be reduced by using feedback from digit recognition results. Using the prediction and its confidence level would allow to discard regions where no reliable identifier has been recognised.

Concerning the digit recognition, 65% of identifiers had one or more of their digits correctly recognised but less than 10% had all their digits properly identified (Fig. 3b). Better segmentation on identifier’s digits would improve digit recognition results, solutions based on contour features or on background and foreground analysis [5] can for instance be explored.



Figure 2: Sample of results : (a) original image, (b) polygon approximation of parcels, (c) extracted parcels and (d) identifiers localization

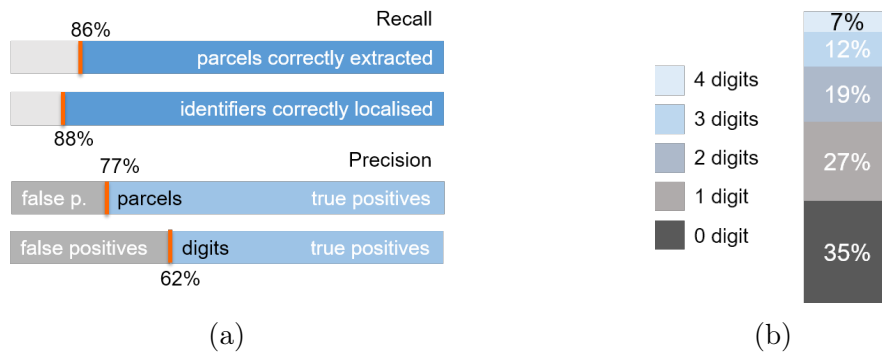


Figure 3: Summary of the results of (a) parcel and digits extraction and (b) digit recognition

This work shows promising results to ease and accelerate cadaster processing, especially with its efficient parcel segmentation and digit identification. The system can be extended and integrated into a user interface to take better advantage from the results, for example by allowing the user to correct or add information about parcels and identifiers. Moreover, the possibility to export parcel’s geometry into GeoJSON format opens up further perspectives to efficiently georeference ancient maps.

A demo code can be found at : <https://github.com/dhlab-epfl/cadasters>

### 3. Work in progress

The EPFL group is currently working on a word matching system to retrieve occurrences of similar words within all archives. We are exploring the use of neural networks to produce accurate descriptors of the word image which are then fed in a word embedding system such as Word2Vec [6]. The combination of graphical form description with context prediction and representation offers an interesting alternative to the accurate transcription constraint, since words employed in similar contexts are likely to be the same.

Preliminary work on newspapers shows encouraging results. Words that are graphically similar are close in the embedded space (lexical similarity, i.e “cat” and “car”), but also

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the neighbourhood of a word is composed of semantically similar words (i.e “Tokyo” and “Japan”).

We are now focusing on extending the method to non-segmented handwritten words, in order to be able to parse all type of documents without the need of accurate segmentation.

## References

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- [2] H. Noizet, B. Bove, and L. Costa, “Paris de parcelles en pixels,” 2013.
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## A. Large Scale Demonstrator GUI





murer



There are 13503 results



Zoom

10y

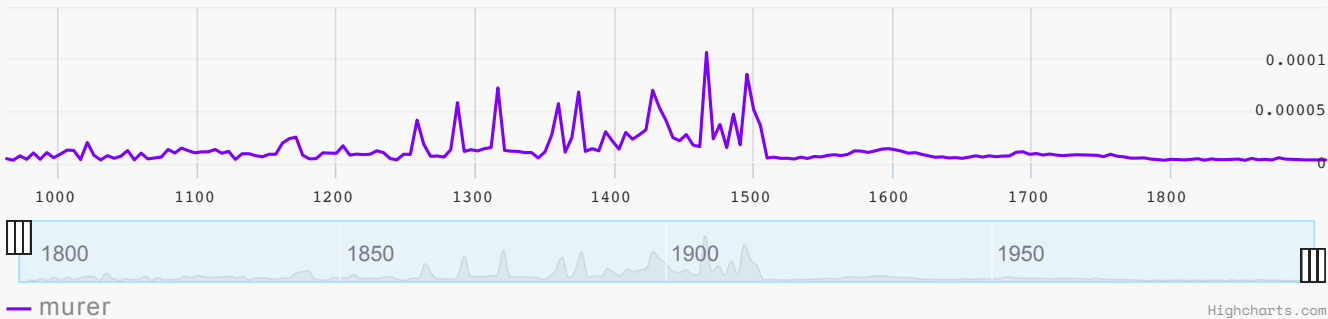
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From 960

to

1890

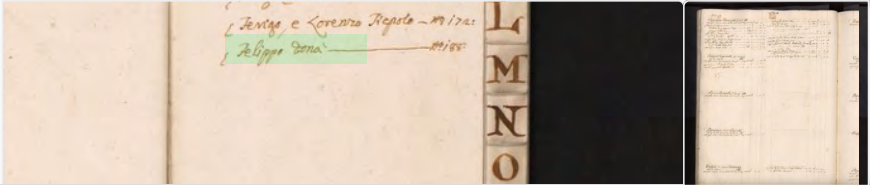


Highcharts.com



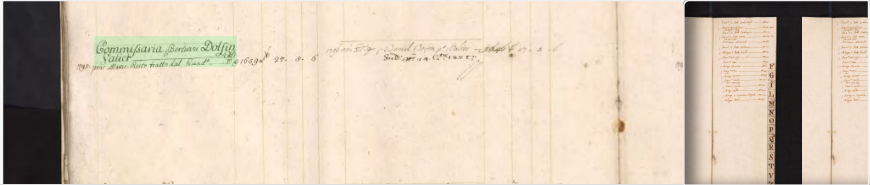
Murer

Quad\_1533 S.Moisé 1424 Page 519



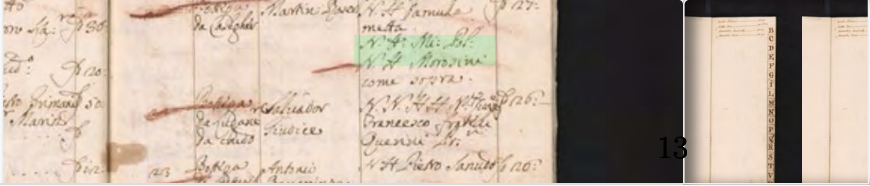
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Index\_Quad\_1521 S.Moisé 1266 Page 712



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Necrologi-859 S.Giminiano 1008-1118 Page 453

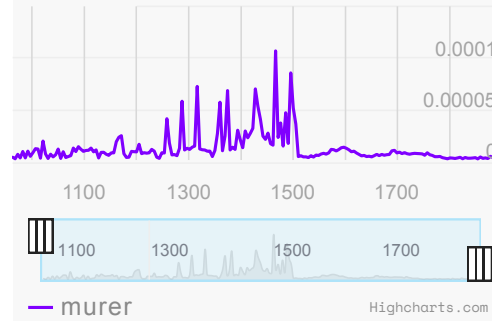




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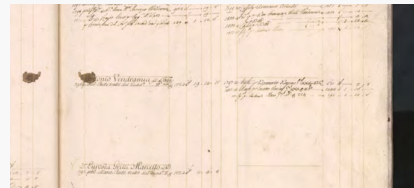
There are 13503 results



Murer

**Quad\_1533** S.Toma 1227

Page 382



Murer

**El\_Pregadi\_30** S.Patemiano 966

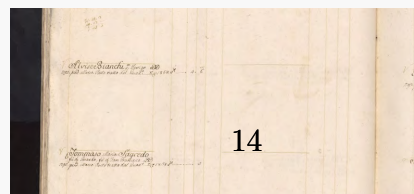
Page 652



Murer

**Necrologi-859** S.Salvador 1226-1228

Page 715



F  
G  
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M  
N  
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P  
Q  
R  
S  
T  
V  
Z

Date / Place Long-ish event description with a person entity link.

Date / Place Event description with words and punctuation, with a person entity link.

Date / Long Place Name Event description with a person entity link.

Date / Place Event description with a person entity link.

Date to date / Place Event description with a person entity link.

Timeline [Edit](#)

Timerange:

1521

ni Scaz... 4

S.Gimignano

1578

Florio...

Antonio di Bortolo 7

Isippo Facheri 15+5

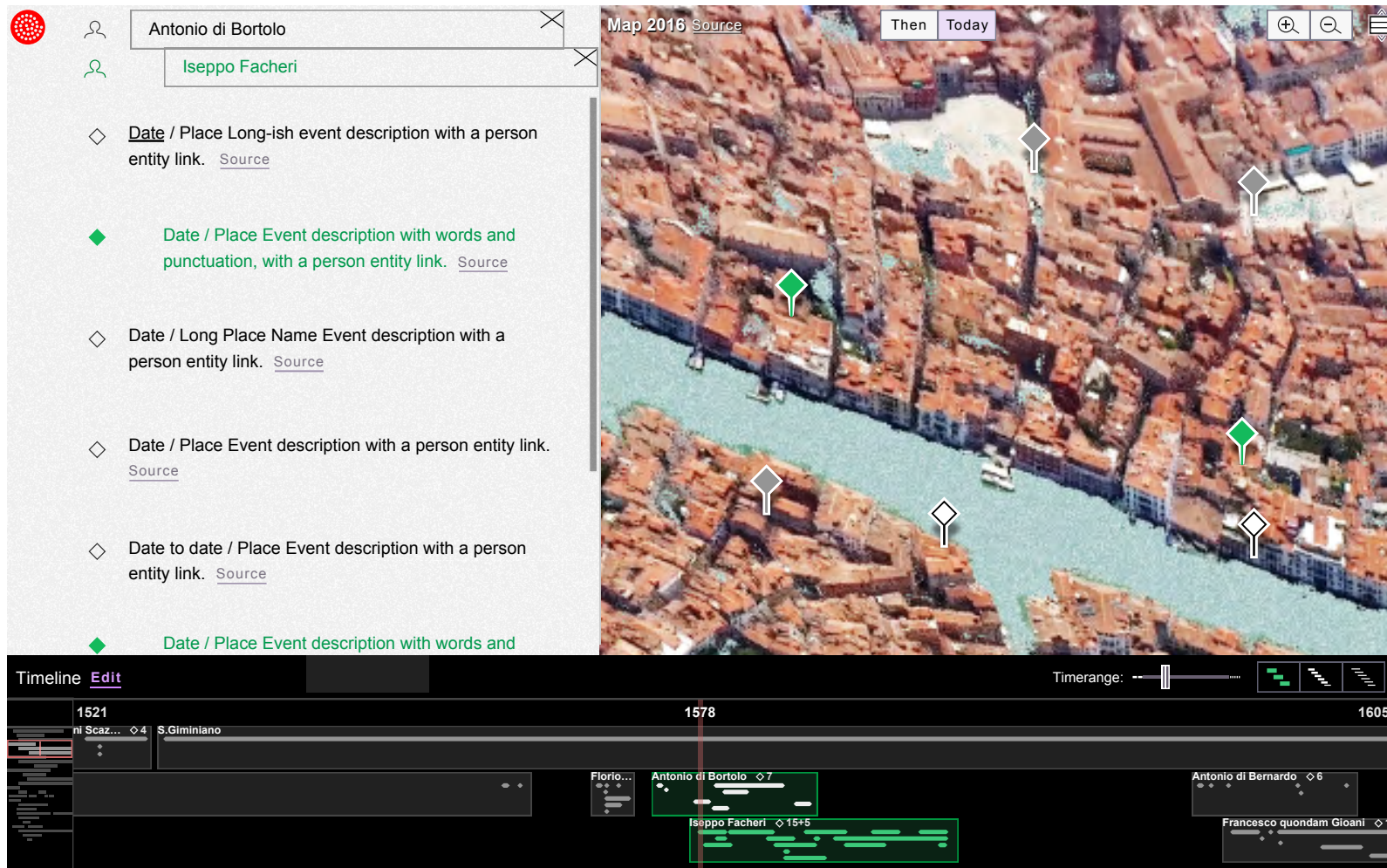
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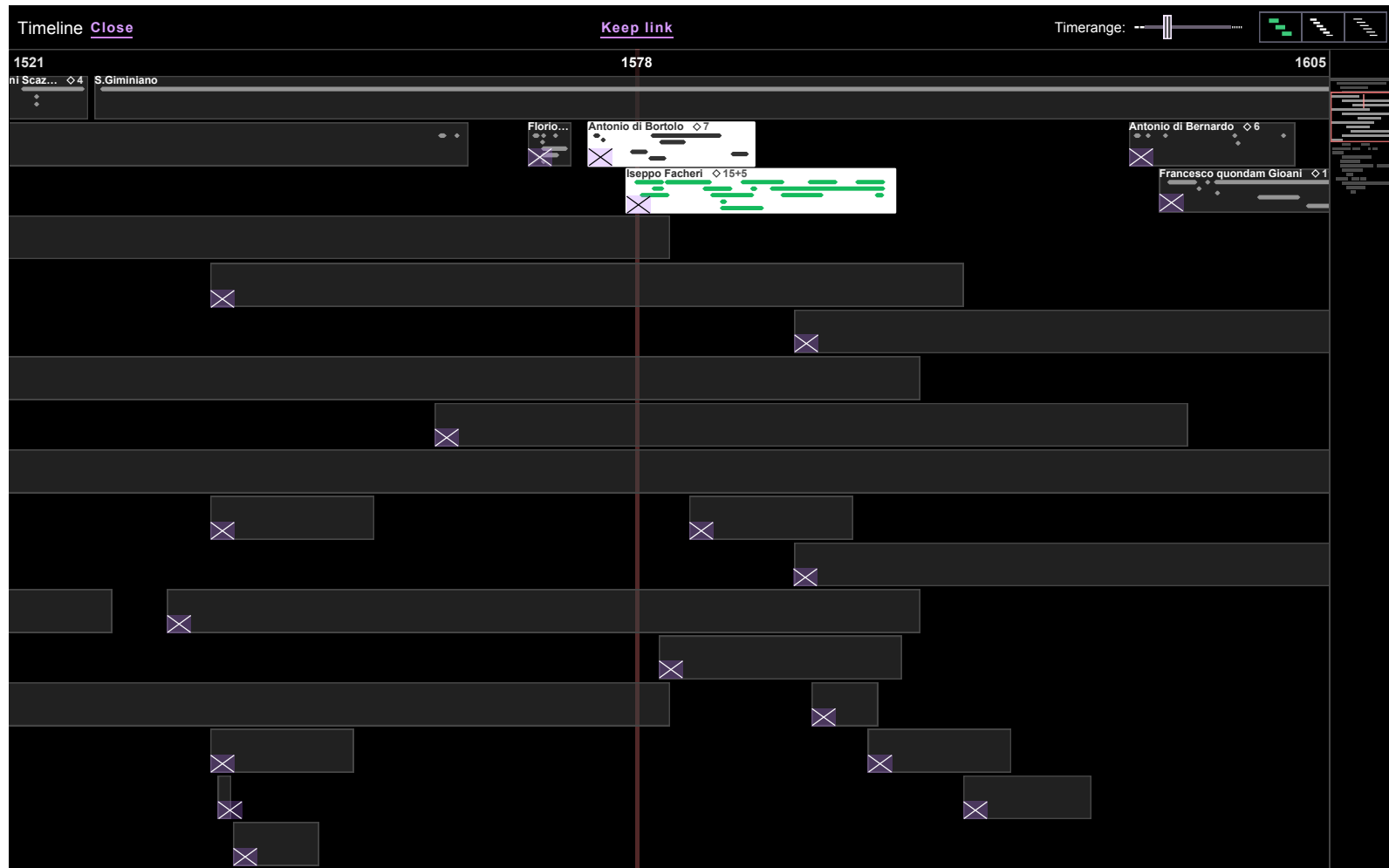
Antonio di Bernardo 6

Francesco quondam Gioani 1



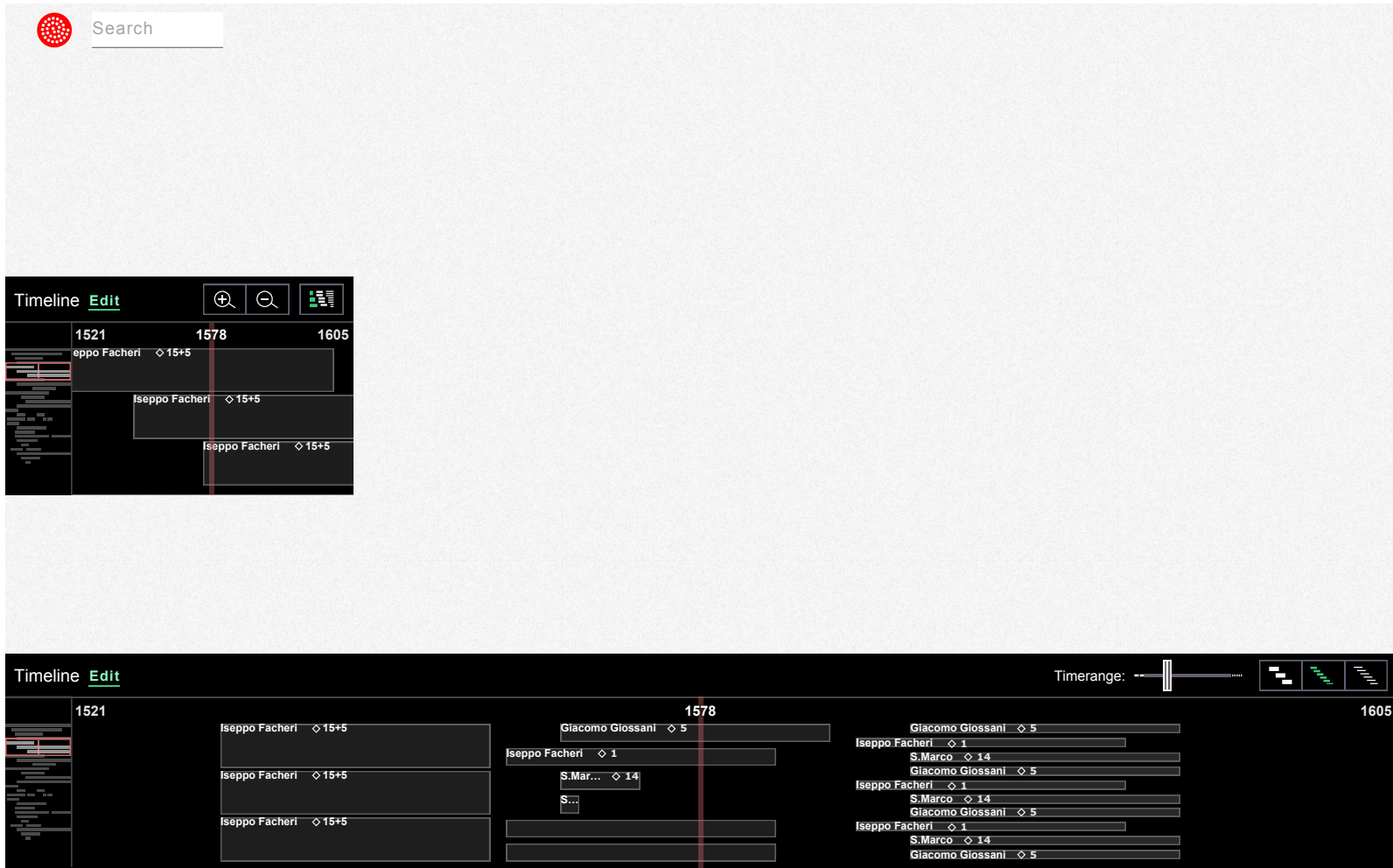




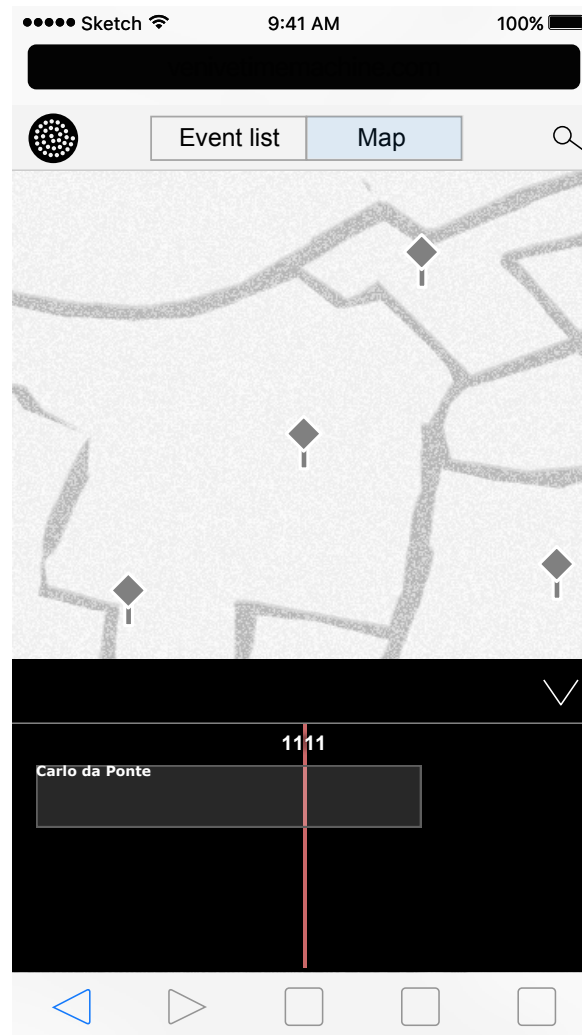


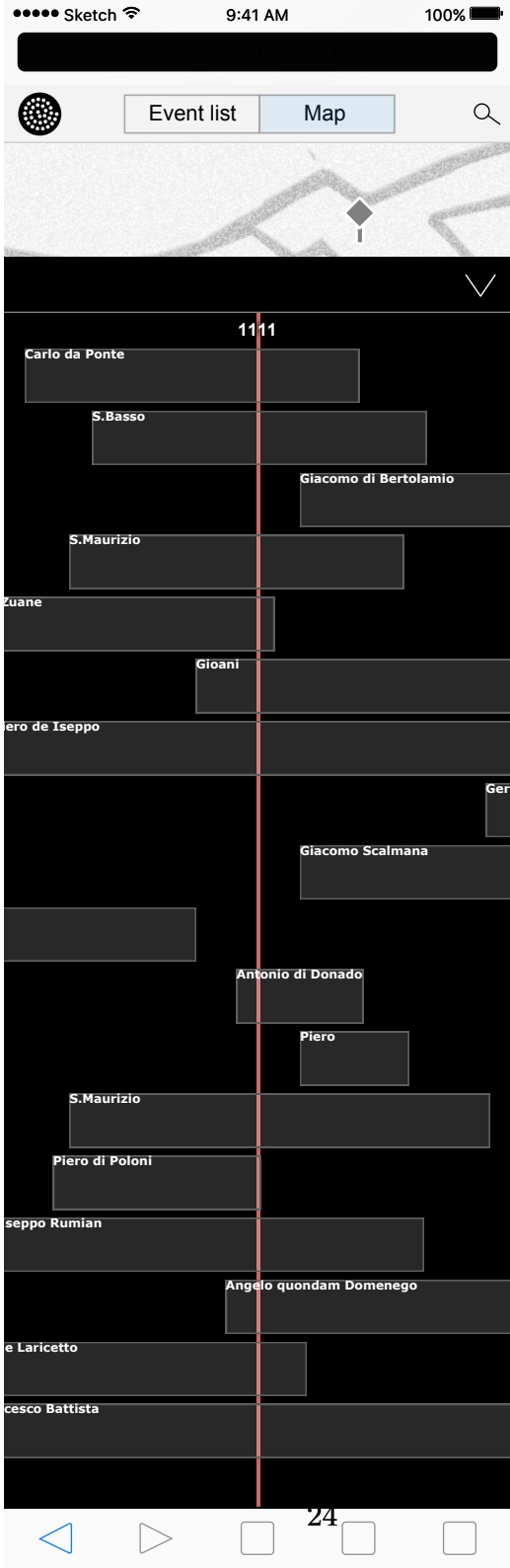
















# B. Large Scale Demonstrator Search



### Time Machine

Here is a place and time for everything



[Search tips](#)



Search a name, a place or an object



Tips to narrow your search



#### All the words in that order

`"words in quotes"` – `"Gianfranco Nanni"`

#### A collection or corpus

`collection name:DD.MM.YYYY` – `catastici:01.01.1500`

#### Results on a date

`date:DD.MM.YYYY` – `date:01.12.1884`

#### Results before or after a date

`before:YYYY` `after:YYYY` – `before:1808 Rialto`

#### Between two dates

`before:YYYY after:YYYY` – `before:1708 after:1808`

#### All the words

`AND` – `energy AND solar`

#### Either words

`OR` – `gaz OR electric`

mur

?

There are 13503 results

Zoom

10y

100y

Tous

From 960 to 1890

mur

Highcharts.com

Antonio di Bortolo

Links

[Iseppo Facheri](#)
[S.Patermiano](#)
[Domenego Tamirelli](#)
[Chasariol](#)
[S.Anzolo](#)

+ 4 more

Events 7

from 1531 to 1547

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Murer

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S.Moisé 1424

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Index\_Quad\_1533

S.Moisé 1266

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Murer

Necrologi-859

S.Giminiano 1008-1118

Page 453

Murer

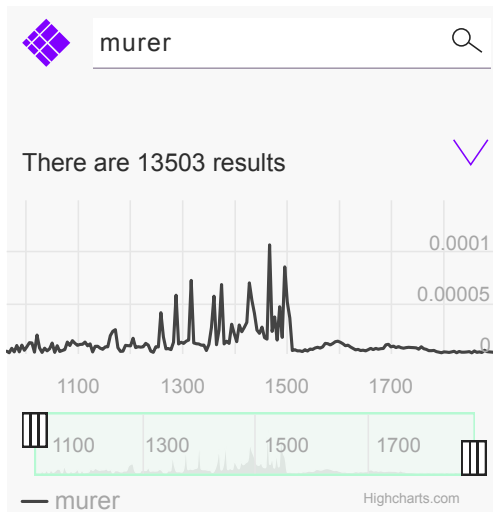
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Zulian 1228

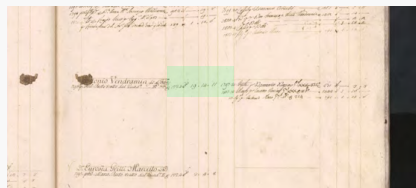
Page 980

Voir plus de résultats

27



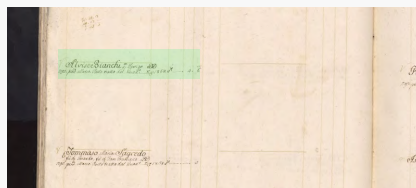
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 Page 382



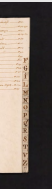
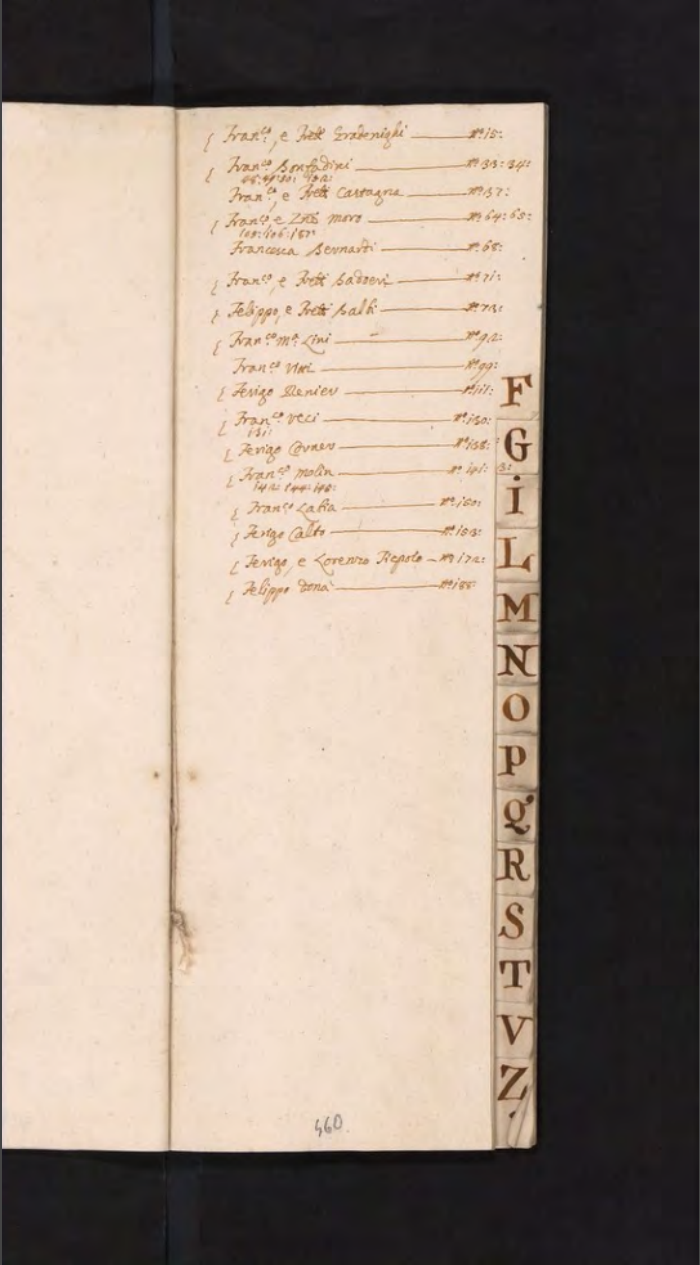
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 Page 652



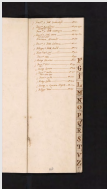
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 Page 715



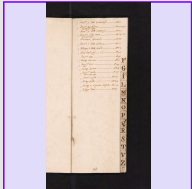




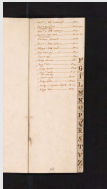
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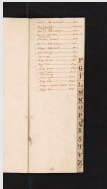
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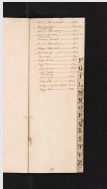
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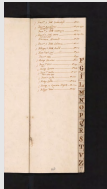
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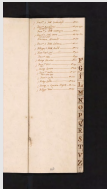
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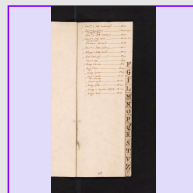
Quad\_1533  
S.Moisé 1424

Thumbnails

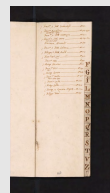
Franc. e. Betti Sasso	1171
Felippo e Betti Salk	1173
Franc. m. Cini	1172
Franc. Mori	1170
Fenice Bianchi	1171
Franc. Ricci	1170
Fenice Orsini	1170
Franc. Molin	1171
Franc. Latta	1170
Fenice Callo	1170
Fenice e Lorenzo Regolo	1172
Felippo Tona	1170

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Page 519



519



520

## C. Transkribus Persona

# 1. Introduction to the Personas

According to the GA and all our papers, we have four main user groups:

- A. Archives, libraries, collection holders
- B. Humanities scholars
- C. Volunteers and public users
- D. Computer scientists and technology providers

Suggestion is to cover them with 7 personas, described in the following pages:

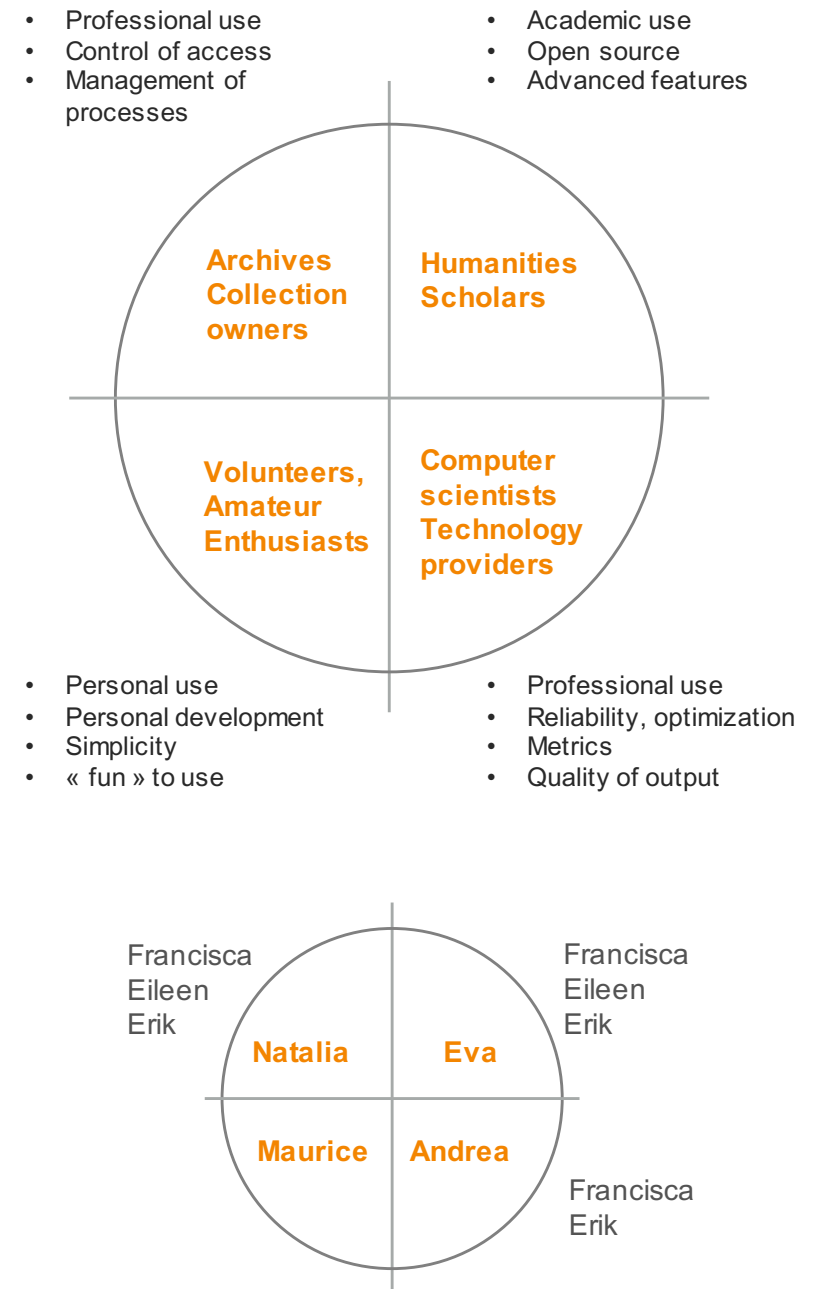
Four main personas:

1. **Natalia** – archivist
2. **Eva** – humanities scholar
3. **Maurice** – family historian
4. **Andrea** – computer scientist

Three additional personas:

*They are often team members of the main personas*

1. **Francisca** – **student**: often a team member of Natalia, Eva, and Andrea
2. **Eileen** – **super transcriber**: sometimes a team member of Natalia and Eva
3. **Erik** – **software engineer**: often a team member of Natalia, Eva, and Andrea



## 2. Distribution of Personas

Estimation of distribution within the 3500 registered users



### **Natalia – archivist**

- About 60-80 persons with direct communication = 2%
- About 300-400 registered = 8-12%



### **Eva – humanities scholar**

- About 20-30 persons with direct communication = 1%
- About 100-150 registered



### **Maurice – family historian/enthusiast**

- About 200-300 person with direct communication = 6-8%
- About 2000-2500 persons registered = 60-80% !



### **Andrea – computer scientist**

- About 10-20 persons with direct communication
- About 30-50 persons registered

## Main Personas



### **Francisca– student: often team member of Natalia, Eva, and Andrea**

- About 30-50 persons with direct communication
- About 150-200 persons registered = 5-7%



### **Eileen – super transcriber: sometimes team member of Natalia and Eva**

- About 3-5 persons with direct communication
- About 20-30 persons registered

## Additional Personas



### **Erik – software engineer: often team member of Natalia, Eva, and Andrea**

- About 5-10 persons with direct communication
- About 30-50 persons registered

### 3. Distribution of users over Persona

Persona	Type	Direct-low	Direct-high	Registered-low	Registered-high
<b>Natalia</b>	Archivist	60	80	300	400
<b>Eva</b>	Scholar	20	30	100	150
<b>Maurice</b>	Family historian, Enthusiast	200	300	2500	3000
<b>Andrea</b>	Computer Scientist	10	20	30	50
<b>Francisca</b>	Student	30	50	150	200
<b>Eileen</b>	Volunteer, Super-transcriber	3	5	20	30
<b>Erik</b>	Software Engineer	5	10	30	50
<b>Total</b>		<b>328</b>	<b>495</b>	<b>3130</b>	<b>3880</b>

**Note:**

Estimation mainly done by GM based on more than one year registration, mailing, workshops, etc.

Figures are only for registered users – of course there are many more contacts etc. with people having not registered



## Natalia

### Archivist, collection manager

Archivist at medium or large archive:

35+ years old

Archival expertise: high

Technical expertise: medium

#### Similar profiles

- Collection owner
- Librarian (special collections)
- Heads of libraries/archives/departments

#### Special power

Domain knowledge about content of the collection. Knowledge on users and their demands.



#### Motivation to use Transkribus

- It allows me to manage multiple digitised collections and organize the transcription process
- It's a one-do-it-all platform
- I can benefit from the work of other institutions/archives to accelerate the process of transcription

#### Daily activities (typical day)

- Manage running projects
- Work with volunteers (give task, motivate, follow-up)

#### What I do most

- Management of collection, definition of tasks
- Follow-up of volunteers and students

#### Frequency of interaction with Transkribus

- Daily

#### Access to resources

- Is involved in decision making on archive level (internal budget)
- Applies for funds on national or international level

#### Objectives

Improve user experience and access to archival collections  
Apply for funds (together with humanities scholars) for digitisation and transcription



#### Frustration with the task

- Transkribus requires serious training if all features and interfaces shall be used
- Crowd sourcing interface is not appealing enough to attract users
- No community manager tool

- Professional use
- Control of access
- Management of processes

- Academic use
- Open source
- Advanced features



- Personal use
- Personal development
- Simplicity
- « fun » to use

- Professional use
- Reliability, optimization
- Metrics
- Quality of output



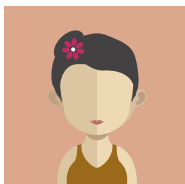
**Location**  
Office

#### Interfaces used

Transkribus expert interface  
Transkribus Webinterfaces  
Mobile interfaces  
REST services (indirectly)

#### Technical proficiency

High: Expert in Transkribus and how to get most out of it for the archive



# Eva

## Humanities Professor

University Professor – 50+ years  
Scientific expertise: Excellent  
Technical expertise: Low to medium

### Similar profiles

- Collection curator
- Editor of historical documents
- Scientific Publisher

### Special power

Domain knowledge, project vision, large network in academic community, access to research grants



### Motivation to use Transkribus

- My team and me can access, work, extract information from historical documents in a previously unknown way
- I need not to care about technology but have a powerful environment to carry out important parts of my research projects
- I have benefits when I apply for the next grant

### Daily activities (typical day)

- Manage running grants
- Teaching
- Organise research with team

### What I do most

- research on my collections
- managing collections, give task to researcher

### Frequency of interaction with Transkribus

- 1 time per month

### Access to resources

- Manages, is responsible for and applies for project grants
- Has access to university/faculty budget
- Is able to involve students

### Objectives

Improve scientific excellence/reputation of myself, my team, my institution  
Manage projects in a reliable way



### Frustration with the task

- Transkribus is one more tool, team needs to get familiar with it
- Interface is not always adapted to my needs;
- Development of new features etc. hard to synchronize with project progress
- No demo mode to showcase the work of my lab



### Location

Universities, laboratories, classrooms

### Interfaces used

Expert interface to manage the whole project  
Webinterface for involving students and collaborators  
Webinterface for publishing documents  
Mobile interface for correcting unclear words  
REST technical proficiency for connection with archives





## Maurice

Enthusiastic amateur  
Family historian

English teacher - 45 years old  
Scholarly expertise: low to medium  
Technical expertise: low

### Similar profiles

- People involved in local history

### Special power

Curiosity, enthusiasm



### Motivation to use Transkribus

- It's a magic tool for transcription
- I can enrich my family history
- I'm interested in genealogy
- I can have access to concrete information
- Read things that I cannot read now

### Weekly activities (typical day)

- Search for information about family members
- Create own collection (small quantity)

### What I do most

- Correction of automatic transcription
- Create simple segment (text area)

### Frequency of interaction (w/ Transkribus)

- 1-2 times a month

### Access to resources

- None

### Objectives

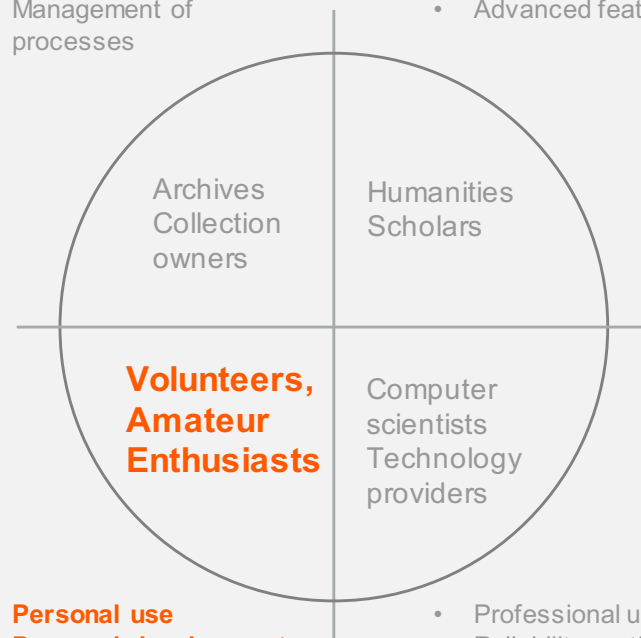
Dig in my family history.



### Frustration with the task

- The automatic transcription does not always give good results;
- I don't understand the interface;
- I can't share the result with my family

- Professional use
- Control of access
- Management of processes
- Academic use
- Open source
- Advanced features



- Personal use
- Personal development
- Simplicity
- « fun » to use
- Professional use
- Reliability, optimization
- Metrics
- Quality of output



### Location

At home

### Interface used

Webinterface with immediate upload and transcription service  
ScanApp for making photos in archives

### Technical proficiency

Low, I know how to use Word and Google



## Andrea

### Computer scientist

PhD knowledge management - 32 years old  
Domain knowledge: High  
Technical expertise: High

#### Similar profiles

- CTO of company
- Expert in digital humanities with high technical expertise
- New generation archivist / historian

#### Special power

Strong expertise in technology and science, but is also interested in humanities



#### Motivation to use Transkribus

- I want to take benefit of the datasets, the domain knowledge and the network of Transkribus
- I want to fulfill my client's request
- I appreciate all possibilities proposed by the interface
- I can rely on the security and accuracy of the tool.

#### Daily activities (typical day)

- Management
- Teaching (if located at university)
- Research

#### What I do most

- Research
- Follow-up of results and output

#### Frequency of interaction (w/ Transkribus)

- Seldom (other team members will be actually involved)

#### Access to resources

- Manages, is responsible for and applies for project grants but also commercial projects
- Has access to university/faculty/company budget
- Is able to involve students or employees

#### Objectives

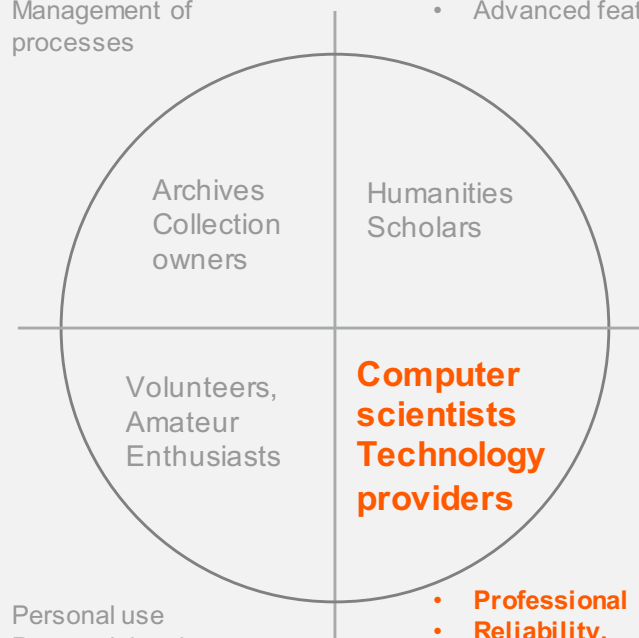
Advances in computer research and technological services  
Receiving new grants and commercial projects



#### Frustration with the task

- Sometimes easier to work with the tools themselves than with the platform
- High learning curve is required for using Transkribus
- Compliance with own tools is not always easy

- Professional use
- Control of access
- Management of processes
- Academic use
- Open source
- Advanced features



- Personal use
- Personal development
- Simplicity
- « fun » to use

- Professional use
- Reliability, optimization
- Metrics
- Quality of output



#### Location

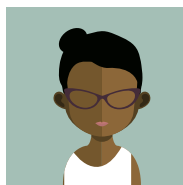
From everywhere

#### Most used interfaces

REST services  
GitHub Repository

#### Technical proficiency

High, I'm an expert in this domain



## Francisca

Master student

Software engineer - 25 years old  
Experience in HTR: middle  
Experience with DH activities: high

### Similar profiles

- Computer science students
- Digital Humanities students
- Young researcher
- Scientific collaborators

### Special power

Focus on task, curiosity

### Daily activities (typical day)

- identify semantic entities
- work on specific layout
- work on metadata

### What I do most

- annotate and add tags
- segmentation
- transcription

### Frequency of interaction (w/ Transkribus)

- almost every day

### Access to resources

- None

### Objectives

Get better in DH research field



### Motivation to use Transkribus

- I like the versatility of the interface
- I can have access to many kind of documents and train myself
- I can improve my skills
- I participate in cutting-edge technology development



### Frustration with the task

- It's a long and frustrating process;
- The interface looks old and does not correspond to what I'm used to
- It's hard to work as a team using the interface



### Location

Universities, at home (remote)

### Interfaces used

Annotation tools (tags, type, entities, etc.)  
Transcription and segmentation tools

### Technical proficiency

High, I'm a skilled engineer



## Eileen

### Volunteer - super transcriber

Retired teacher – 60+ years old  
Domain knowledge: low but growing  
Technical expertise: low

#### Similar profiles

- People with a strong interest in history
- Editor of Wikipedia
- People inclined to work for non-profit organisations

#### Special power

Have time, can read or are motivated to learn hand-written manuscript. Dedicated to a famous person



#### Motivation to use Transkribus

- I can work with documents that concern me (family, local activities, community)
- I play a role in a non-profit, cultural project (and get invited for Christmas dinner)
- I enlarge my skills and experience and share it with the community
- I can use the e-learning module to improve my skills
- I enjoy working with gradually complex documents

#### Daily activities

- Transcribe documents
- Add tags

#### What I do most

- Transcribe documents including segmentation

#### Frequency of interaction (w/ Transkribus)

- 4-5 times a week

#### Access to resources

- Own working power (which can be a lot!)

#### Objectives

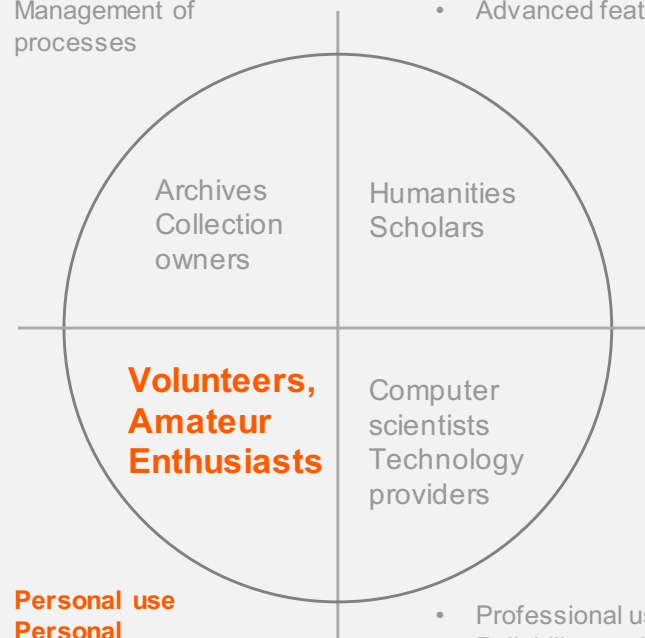
Find interesting activities to occupy my time.



#### Frustration with the task

- Transkribus requires serious training if all features and interfaces shall be used
- Crowd sourcing interface is not appealing enough to attract users
- No community manager tool
- I need help for installation

- Professional use
- Control of access
- Management of processes
- Academic use
- Open source
- Advanced features



- Personal use
- Personal development
- Simplicity
- « fun » to use

- Professional use
- Reliability, optimization
- Metrics
- Quality of output



#### Location

At home

#### Interface most used features:

Transkribus Webinterface (Crowd sourcing - tool)  
Transkribus expert tool

#### Technical proficiency

Starting as novice I am improving and become an expert in my specialized field



**Erik**

**Software developer**

Software engineer - 29 years old  
Technical expertise: excellent  
Scholarly expertise: low

#### Similar profiles

- PhD Computer scientist
- Early adopter (interested in technology)

#### Special power

Coding, interpretation of software behavior



#### Motivation to use Transkribus

- It's one of the most advanced software for transcription and I'm part of it
- It's a engineering challenge: I can develop and test new functionalities on a huge collection of documents
- It's part of my job to support others in their use of Transkribus

#### Daily activities (typical day)

- Coding to improve back/front-end
- Testing new algorithms

#### What I do most

- I use advanced features on complex documents
- Identify limitation of Transkribus and find ways to improve it

#### Frequency of interaction (w/ Transkribus)

- every day for testing development

#### Access to resources

- Limited

#### Objectives

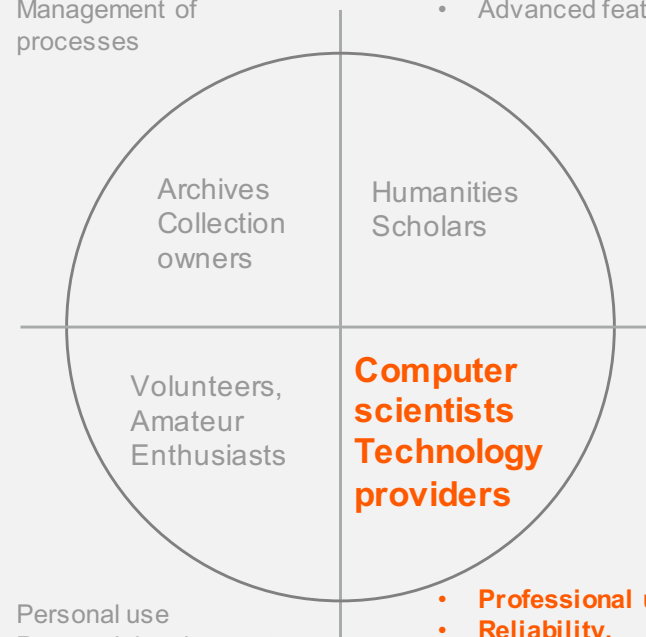
Improve Transkribus engine, enhance experience with the interface, win competition



#### Frustration with the task

- The development is a bit scattered
- A lot of time is needed to guarantee interoperability
- There is no developer interface to upload and share results with my remote colleagues

- Professional use
- Control of access
- Management of processes
- Academic use
- Open source
- Advanced features



- Personal use
- Personal development
- Simplicity
- « fun » to use

- Professional use
- Reliability, optimization
- Metrics
- Quality of output



#### Location

From everywhere

#### Interfaces used:

Github  
REST

All interfaces from the technical point of view, i.e. testing, debugging, but also user training  
Competition platforms

#### Technical proficiency

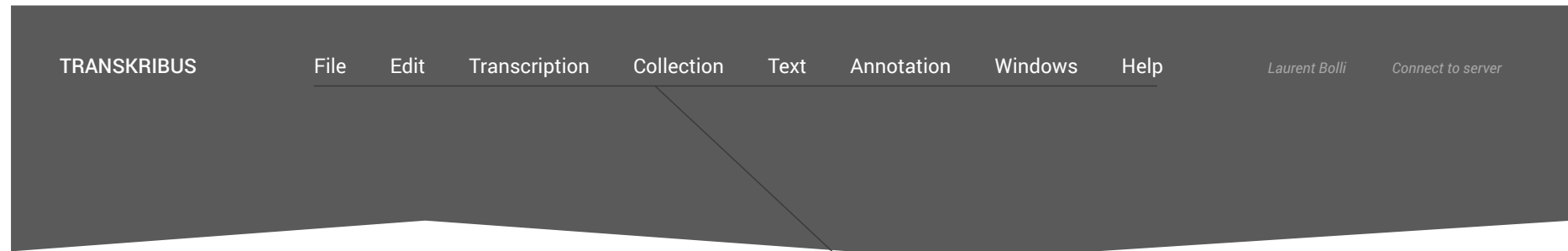
Expert: I know how Transkribus platform is coded

## D. Transkribus Expert New GUI



LOGIN

SIGN UP

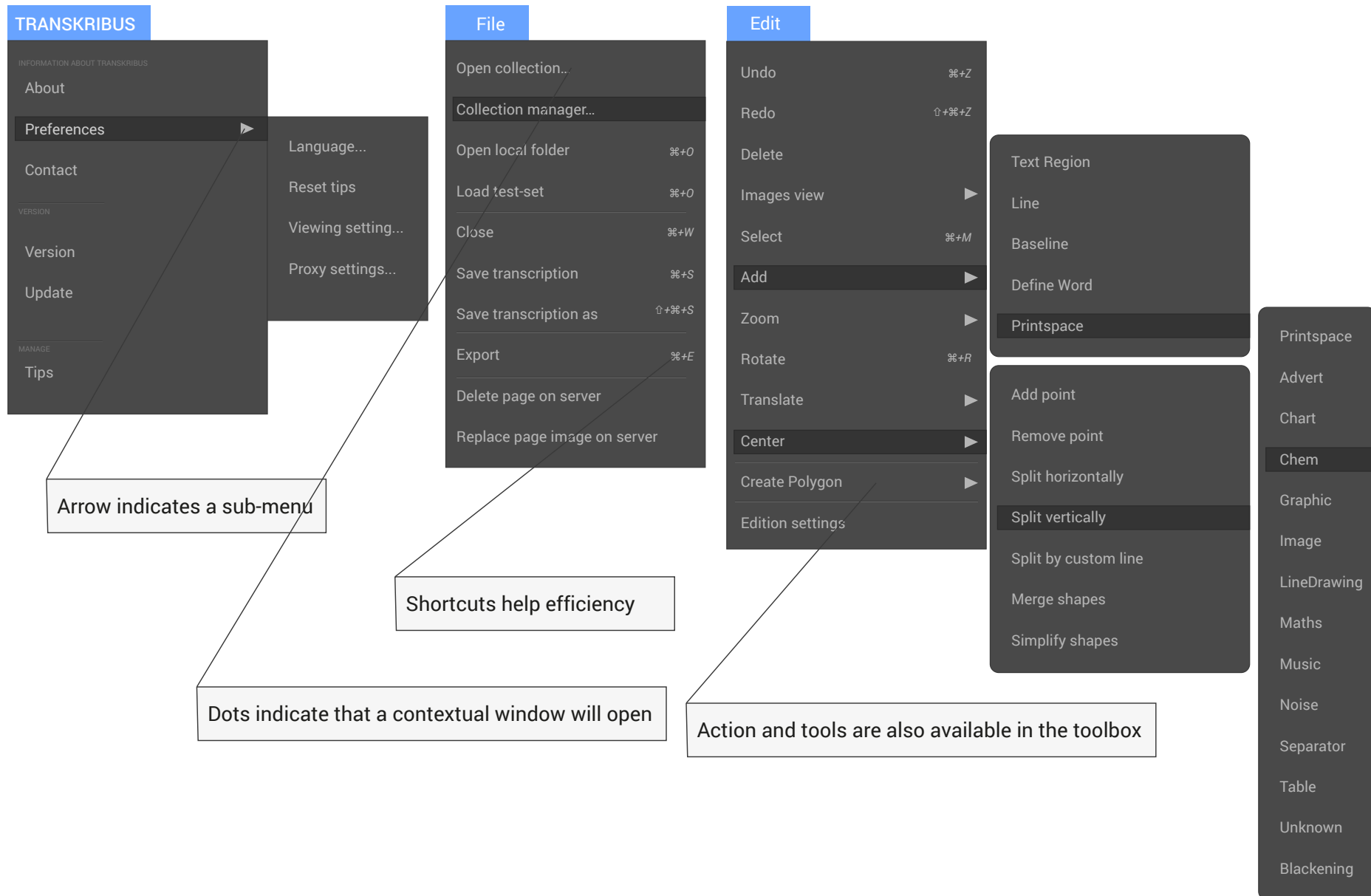


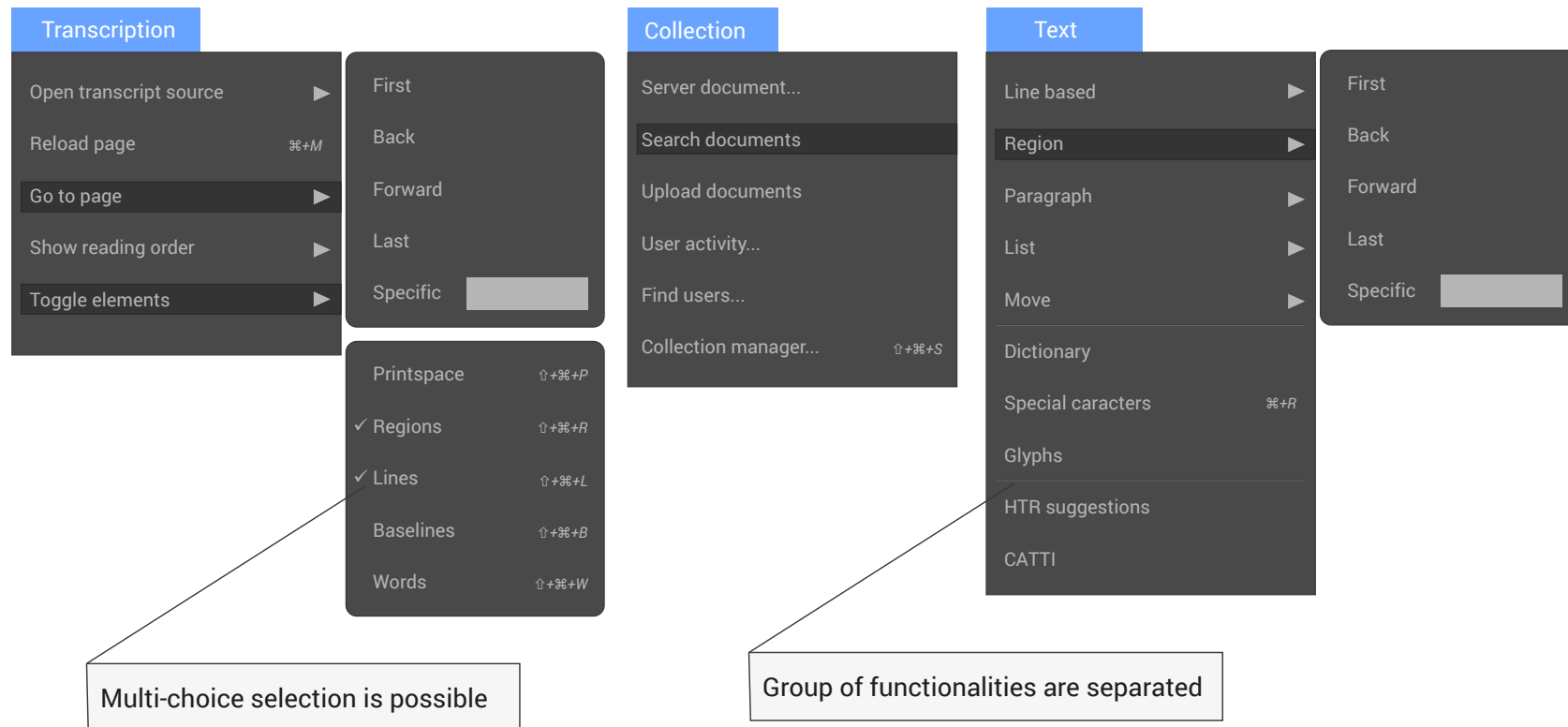
**UI Governing principles:**

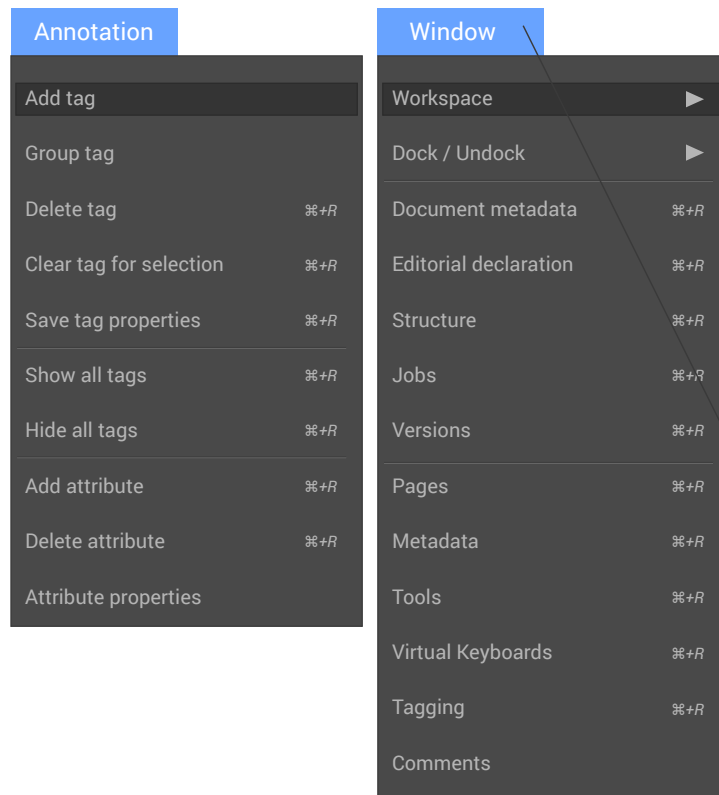
- full screen
- menu with all functionalities with similar organization as Word or Photoshop
- contextual windows: one function for each
- maximum flexibility for contextual windows in terms of sizes and arrangement
- bigger and web adapted fonts and spacing for a better legibility, especially for senior users
- collapsable toolbox with direct access to main functionalities
- personalized workspace (preset and custom)
- more settings for the users: change background color for example
- consistency in graphic design elements (icons, color, fonts, etc.)

Menu entries follow standard order









The Window menu groups every contextual windows

Documents Metadata

Loaded document:

Current collection:

Current filename:

Current image URL:

Current transcript URL:

Document metadata

Editorial declaration

Server documents

Login

Collection:

Filter:

◀◀

◀

/ 0

▶

▶▶

Username	Firstname	Lastname	Role

Items per page:

25

Viewing Preferences

Line width

3

Points size

3

Draw line width

3

Draw color

Alpha:

100

Reading order circle

89

Draw baseline arcs

ON

Draw corner numbers

OFF

Do transition on focus

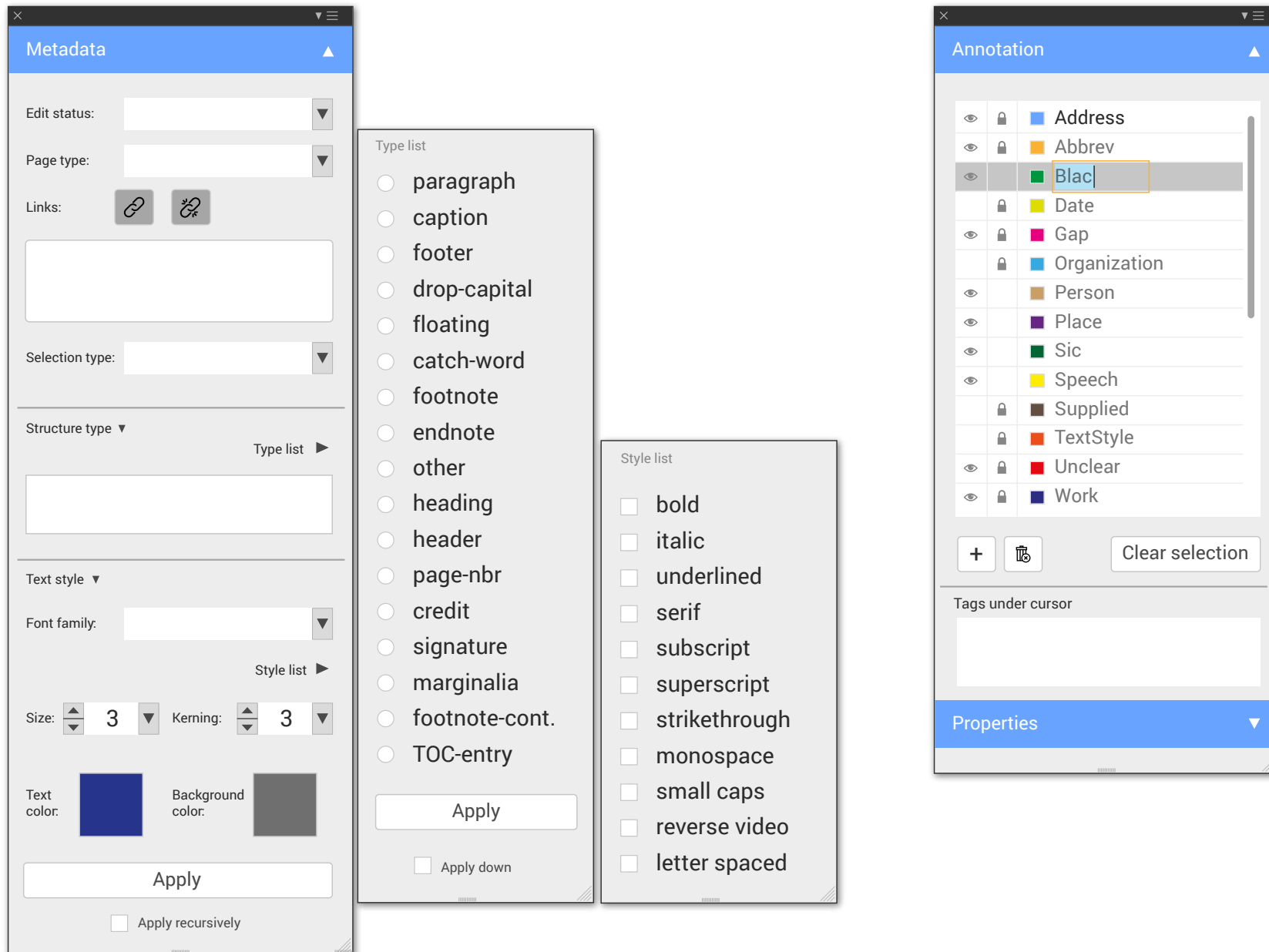
ON

Printspace color

Lines color

Baseline color

Words color



Tools

Layout detection

☐ Regions
☐ Lines
☐ Baselines

Detect

Text recognition

Run text recognition

Structure analysis

☐ Page #
☐ Footnotes
☐ Header

Run structure analysis

Compute accuracy

Reference: Choose... ☐ Use current

Hypothesis: Choose... ☐ Use current

Compare

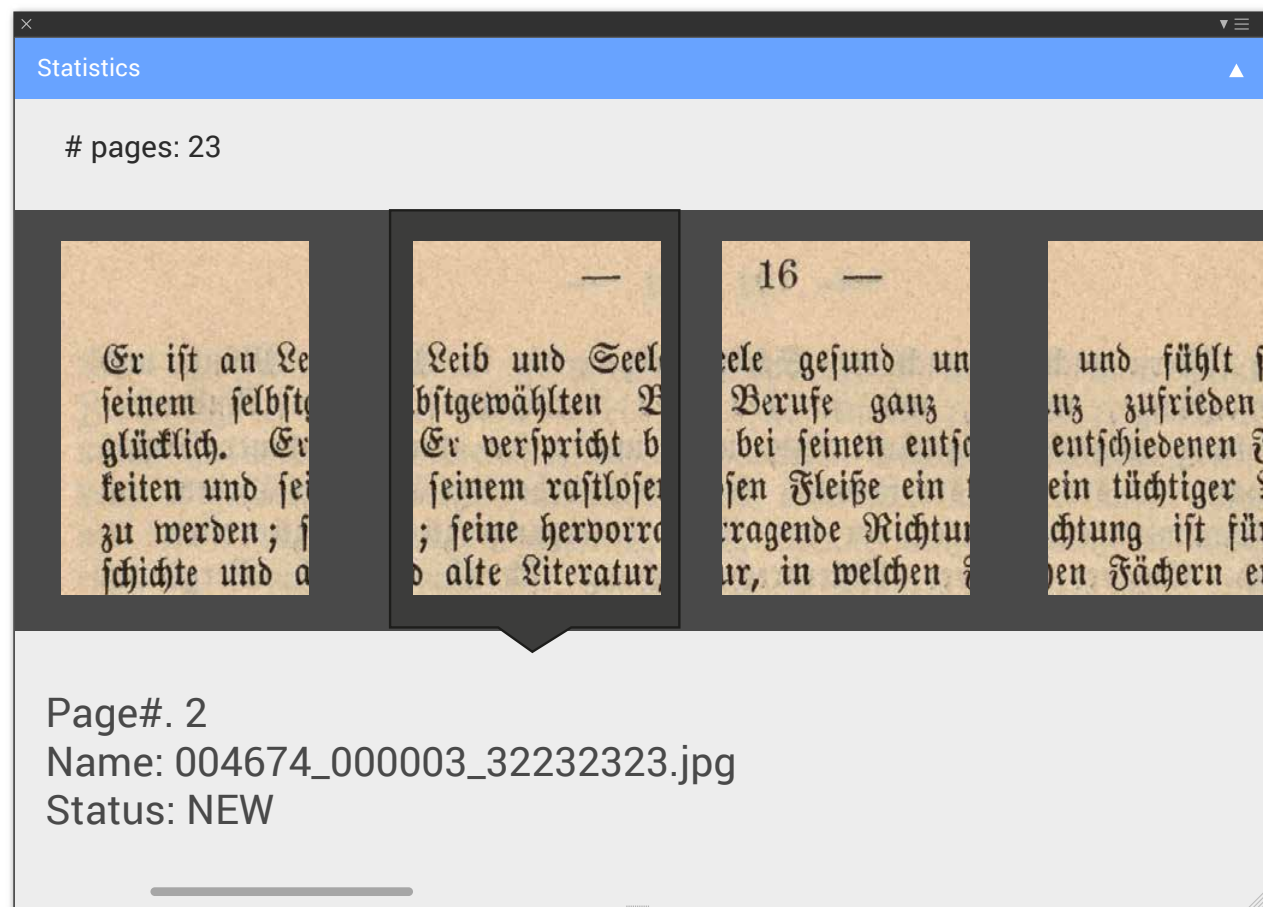
informations about Tools

Virtual keyboard

Edit...

Display: Custom

-	-	±	#	-	[	]	{	}	<	>	≤	≥	/	\	~	'	•	•	•
~	*	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Nº	1/8	1/4	1/2	3/4	3/8	5/8	7/8	•	x	a	ƒ	ø	o	1	2	3	≡	≈	§
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Collection Manager

▼ Collections

1-0 / 0

◀ ◀

/ 0

▶ ▶

ID	Name	Role	Description

Items per page: 25 ▼

↺

+

🗑️

Modify collections...

▼ Documents

◀ ◀

/ 0

▶ ▶

Documents in collection ▼

ID	Title	# Pages	Uploader	Uploaded	Collections

Items per page: 25 ▼

↺

+

🗑️

📄

Remove from collection



User manager

▼ Users in collection

Username	Firstname	Lastname	Role
----------	-----------	----------	------

Items per page: 25 

+

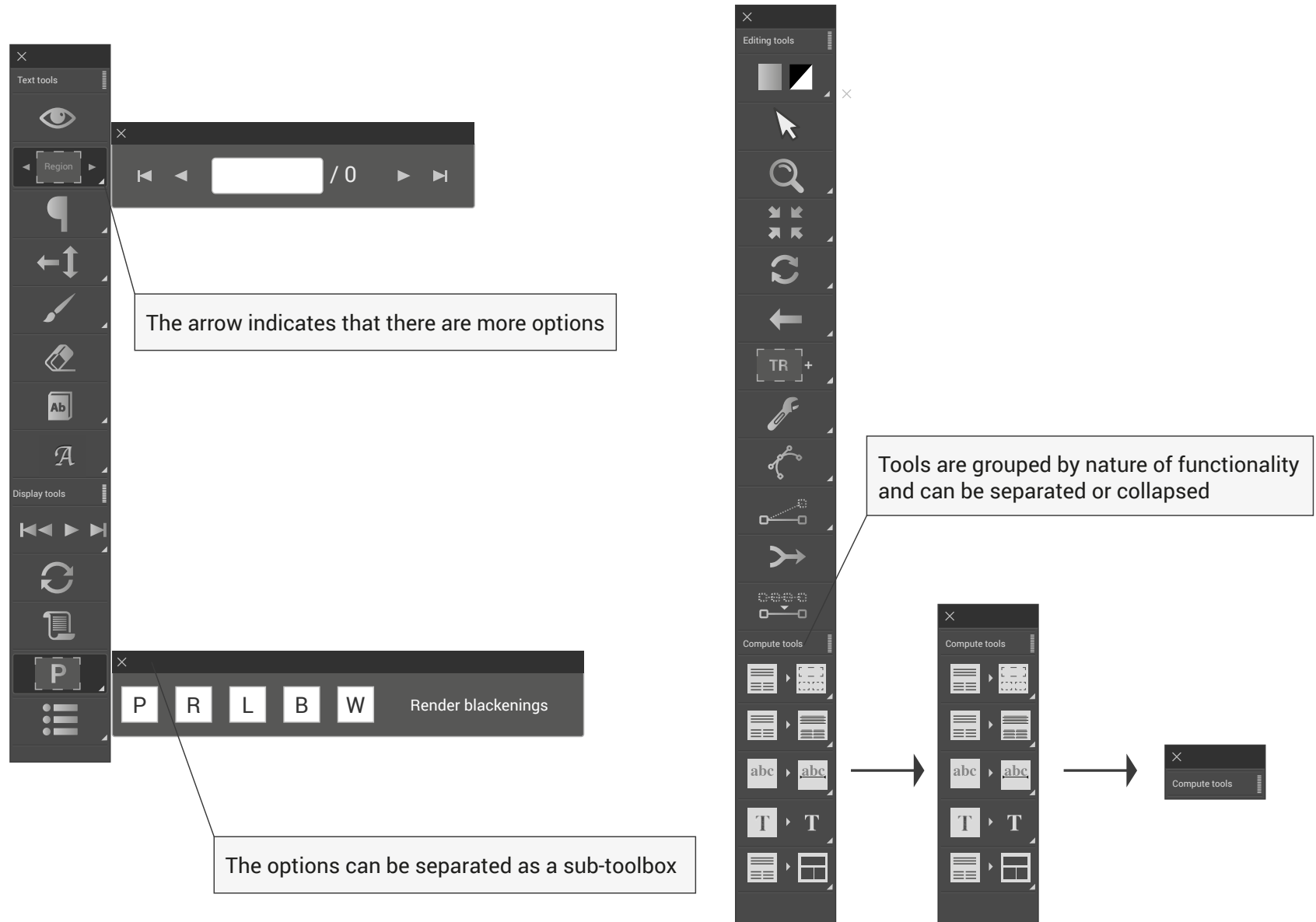
🗑️

 Role:

🔍

Ex: name, surname, email, etc.

Username	Name
----------	------



Chrome File Edit View History Bookmarks People Window Help

Transkribus

https://transkribus.eu/Transkribus/

TRANSKRIBUS File Edit Transcription Collection Text Annotation Windows Help Laurent Bolli Connect to server

Undo ⌘+Z  
Redo ⇧+⌘+Z  
Delete  
Images view  
Select ⌘+M  
Add  
Zoom  
Rotate ⌘+R  
Translate  
Center  
Create Polygon  
Edition settings

Text Region  
Line  
Baseline  
Define Word  
Printspace

Er i  
seiner  
glück  
feiter  
zu m  
schichte und alte Literatur, in welchen Fächern er ein  
manches zu leisten verspricht. Mein zweiter Sohn  
Maximilian hat noch bis August in der Militär-  
Akademie zu Wiener-Neustadt zu verbleiben und tritt  
dann, wie ich hoffe, als Officier in die kaiserliche  
Armee. Meine treffliche Frau Louise ist recht gesund

Viewing Preferences

Line width 3  
Points size 3  
Draw line width 3  
Draw color  
Alpha: 100  
Reading order circle 89

Draw baseline arcs ON  
Draw corner numbers OFF  
Do transition on focus ON  
Printspace color  
Lines color  
Baseline color  
Words color

## E. Transkribus Online Widget - version 1





LOGIN



Learn more about  
Transkribus Interfaces  
and why your contribution matters.

ChromeFileEditViewHistoryBookmarksPeopleWindowHelp

Transkribus

https://transkribus.eu/Transkribus/

Transkribus

TRANSKRIBUS  
SEARCH & CORRECT

TRANSKRIBUS  
PROOF-READING

TRANSKRIBUS  
E-LEARNING

TRANSKRIBUS  
SEARCH & EXTRACT

TRANSKRIBUS  
CROWD SOURCING

TRANSKRIBUS  
EXPERT INTERFACE

TRANSKRIBUS  
IMAGE EXPLORER

TRANSKRIBUS  
SCAN APP

TRANSKRIBUS  
COMPETITION

TRANSKRIBUS  
PROFILE SETUP

RE  
AD

Recognition &  
Enrichment of  
Archival Documents

ABOUT

Transkribus Search & Extract module is an interface that allows you to extract information from a given archive. Explanation text about selection.

LOGIN

Learn more about  
Transkribus Interfaces  
and why your contribution matters.





PROFILE SETUP

PROFILE SETUP - STEP 1  
Please fill mandatory fields

1. PROFILE INFORMATIONS

*name	<input type="text"/>
*surname	<input type="text"/>
*email	<input type="text"/>
*Username	<input type="text"/>
*Password	<input type="password"/>
*Repeat Password	<input type="password"/>

\* Mandatory Fields




Member since Jan. 2016

2. WRITE A SHORT BIO

## PROFILE SETUP - STEP 2

Please give some informations about your skills.

You can modify your profile at any time by clicking on: 

Try one of our:

[CLASSROOM MODULE](#)

### 3. MOTHER TONGUE

### 4. LANGUAGES SKILLS

[ENGLISH](#)
[ITALIAN](#)
[DUTCH](#)
[SPANISH](#)
[GERMAN](#)
[FRENCH](#)

[OLD ENGLISH](#)
[OLD ITALIAN](#)
[WEST GERMANIC](#)
[FRANKISH](#)

[OLD DUTCH](#)
[OLD VENITIAN](#)
[OLD SPANISH](#)
[LATIN](#)

[GREEK](#)
[GREEK](#)

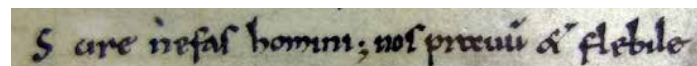
### 5. INTERESTS

[FAMILY](#)
[DIPLOMACY](#)
[TESTIMONY](#)
[LITERATURE](#)
[ESSAYS](#)

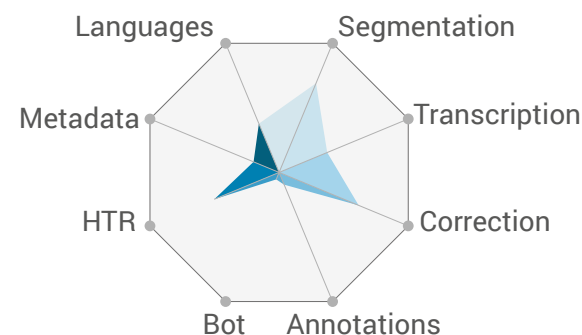
[INVENTORIES](#)
[RELIGION](#)
[CONTRACTS](#)
[OBJECTS](#)
[REPORTS](#)

[CADASTER](#)
[POLITICS](#)
[LETTERS](#)
[PEOPLE](#)
[ECONOMY](#)

### 6. READING SKILLS: SELECT THE ONES YOU CAN READ



### CURRENT PROFILE





- transcribe



Transcriber ☒ ?

transcribe

## Transkriber

## Transkript

transcrite

transcribe

transiente



Chrome
File
Edit
View
History
Bookmarks
People
Window
Help

Transkribus

https://transkribus.eu/Transkribus/

Correction interface, line by line

FAQ
Laurent Bolli
Log out

Background opacity 0%

▲

▼

Er ist an Leib und Seele gesund und fühlt sich in seinem selbstgewählten Berufe ganz zufrieden und

Er ist an Leib und Seele gfund und fühlt sich in seinem selbstgemählten Berufe ganz zufrieden und|

SAVE

Last save:

28.07.2016

16:41 EST

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es

La: La<sup>p</sup>

p<sup>d</sup>

A<sup>o</sup>

o<sup>r</sup>

Wor<sup>ll</sup>

Ex<sup>t</sup>

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w<sup>ch</sup>

w<sup>th</sup> w<sup>h</sup>

y<sup>t</sup>

Ho, hono<sup>ble</sup>

esq.

Ma<sup>tle</sup>

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⌘

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T<sup>xt</sup>

## Correction interface, line by line

TRANSKRIBUS  
SEARCH & CORRECT

FAQ [Laurent Bolli](#) [Log out](#)

Background opacity 0%

seinem selbstgewählten Berufe ganz zufrieden und glücklich. Er verspricht bei seinen entschiedenen Fähigkeiten und seinem rastlosen Fleiße ein tüchtiger Mann zu werden; seine hervorragende Richtung ist für Ge-

PREVIOUS

seinem selbstgemählten Berufe ganz zufrieden und glücklich. Er verspricht bei seinen entschiedenen Fähigkeiten und seinen rastlofen Fleisse ein tüchertiger Mann zu werden; seine herborragende|

SAVE

Last save:  
28.07.2016  
16:41 EST

NEXT

tT 30





ChromeFileEditViewHistoryBookmarksPeopleWindowHelp

Transkribus

https://transkribus.eu/Transkribus/

Correction interface, line by line

Transkribus  
SEARCH & CORRECT

FAQLaurent BolliLog out

Background opacity 80%

— 16 —

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Transcription

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tT12SAVE

Snapshot Keyboard

w<sup>ch</sup>w<sup>th</sup> w<sup>h</sup>y<sup>t</sup>y<sup>t</sup>s<sup>s</sup>Ma<sup>tle</sup>Ho, hono<sup>ble</sup>esq.  
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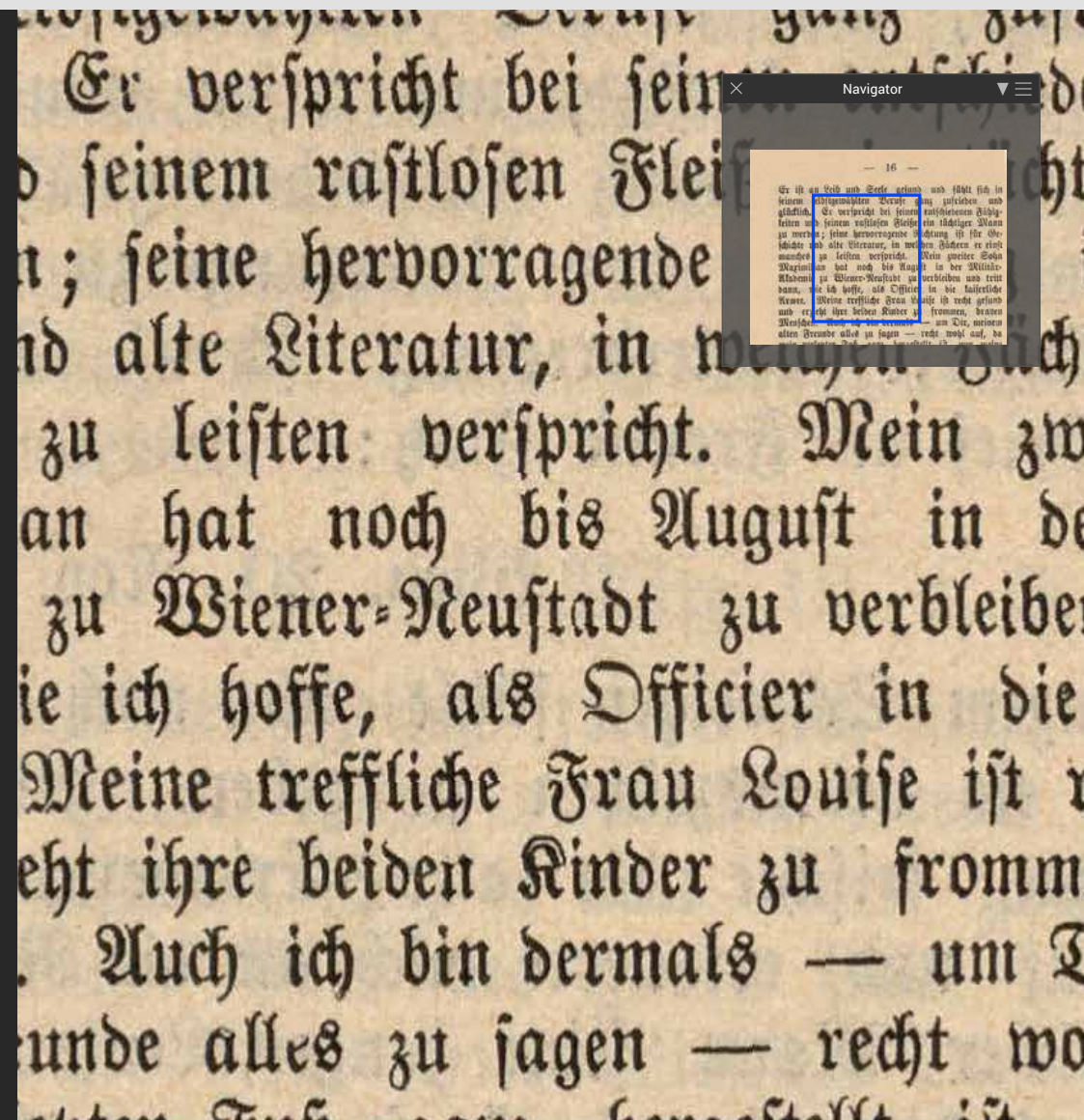
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LOAD



☐ Original version
 ☒ Your version

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## E-learning home page

TRANSKRIBUS  
CLASSROOM


FAQ [Laurent Bolli](#) [Log out](#)

Welcome to Transkribus Classroom.  
Select one of our modules to validate your skills or train freely.

Sort by [FREE TRAINING](#) [FAQ](#)

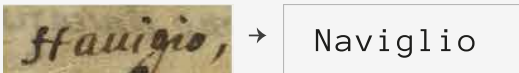
✓ DIGITAL HUMANITIES - BASIC I

MCQ - 50 Questions  
1324 people completed this module




→ TRANSCRIPTION - BASIC I

MCQ - 25 Questions  
165 people completed this module




→ SEGMENTATION- BASIC I

MCQ - 50 Questions  
1324 people completed this module



→ CORRECTION - BASIC I

MCQ - 25 Questions  
165 people completed this module



### TESTS ▼

All types

### TOP BASICS

#### 1. DH Elementary notions

by Günther

#### 2. Text segmentation - learn the base

by Eva

#### 3. DH CANVAS / hands-on

by Laurent

#### 4. DH CANVAS / hands-on

by Profile XY

### SUGGESTION FOR YOUR PROFILE

#### 1. ADVANCED OPERATOR (...)

by Profile XY

#### 2. Venitian 3D building

by Profile XY

#### 3. DH CANVAS / hands-on

by Profile XY

1 2 3 4 5 6... Next Show 10 / 50 / 100 results

[READ FAQ BEFORE STARTING](#)

This test is intended to evaluate your basic knowledge in transcription and help you learn the process.

20 minutes / 50 questions

TRANSCRIPTION - BASIC I is a MCQ type of test. You will be asked to answer to different kind of questions with multiple choice answers. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur

20:00

[illegible]



3%

16:32

Complete the transcriptions: a word is missing in this transcription.



Maximilian hat noch bis August in der Militär-

\_\_\_\_\_

**in der Militär-**



☒ ☒ 3

Click anytime to jump to any question

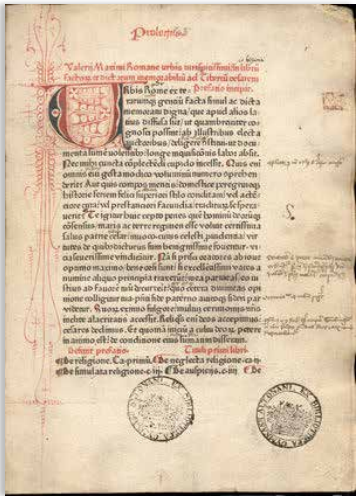


E-learning test example page

TRANSCRIPTION - BASIC I

8% STOP 16:32

QUESTION 5 - multiple choice



What is an **incunable** ?

- ☒ 1. A hand-written manuscript
- ☐ 2. A printed book from the XVII century
- ☐ 3. A religious manuscript
- ☒ 4. A hand-written or printed book before 1501
- ☐ 5. A printed book before 1501
- ☐ 6. A tool to bind book from the XVIe century
- ☐ 7. A tool to seal printed book

Progress bar with 25 boxes. The first four boxes are marked with a red 'X', a green checkmark, a green checkmark, and a green checkmark respectively. The remaining 21 boxes are empty.

Click anytime to jump to any question

E-learning test example page

TRANSCRIPTION - BASIC I

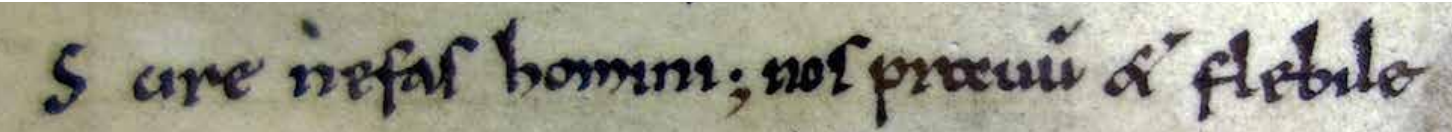
14%

STOP

13:15

QUESTION 8 - Transcribe

Transcribe the following image:



Progress bar with 20 checkboxes. The 8th checkbox is selected (blue triangle above it). The 1st checkbox is marked with a red X. Below the checkboxes is the text: Click anytime to jump to any question

E-learning test result page

TRANSCRIPTION - BASIC I

100%

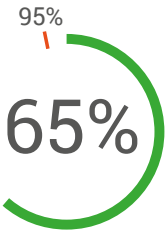
RESTART

01:15

COMPLETED

RESULTS

Thank you for your efforts!  
Unfortunately, your score is under 95%. Restart the test to validate your transcription skills and get access to more interesting documents.



Questions to review:

- |                                      |                            |
|--------------------------------------|----------------------------|
| 01: Compare images and answer        | <a href="#">SEE ANSWER</a> |
| 09: Complete the transcription       | <a href="#">SEE ANSWER</a> |
| 10: True or false                    | <a href="#">SEE ANSWER</a> |
| 18: Transcribe                       | <a href="#">SEE ANSWER</a> |
| 23: Transcribe                       | <a href="#">SEE ANSWER</a> |
| 33: Select the correct abbreviations | <a href="#">SEE ANSWER</a> |
| 35: Transcribe the numbers           | <a href="#">SEE ANSWER</a> |

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Click anytime to jump to any question

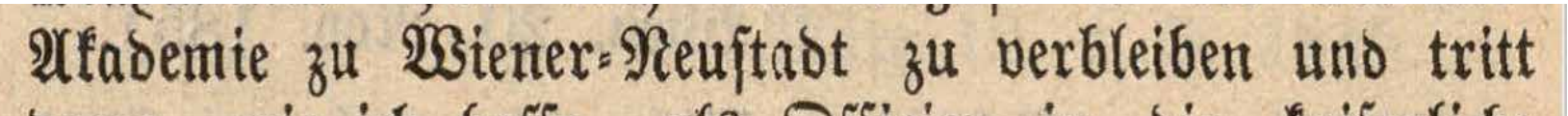
E-learning Free training (no timer) page

FREE TRAINING - TRANSCRIPTION

Training mode: **Complete**

CHANGE

Complete the transcription: a word is missing.  
Note: you don't have to answer to go to the next question.



zu Wiener-Neustadt zu verbleiben und tritt

NEXT

if correct →

zu Wiener-Neustadt zu verbleiben und tritt

if not correct,  
word is erased  
and a red cross  
appears briefly

zu Wiener-Neustadt zu verbleiben und tritt



## F. Transkribus Online Widget - version 2

☐ Original version    ☒ Your version

Il y a quelques années qu'en visitant, ou, pour mieux dire, en furetant Notre-Dame, l'auteur de ce livre trouva, dans un recoin obscur de l'une des tours ce mot, gravé à la main sur le mur :

Ces majuscules grecques, noires de vétusté et assez puissamment entaillées dans la pierre, je ne sais quels signes propres à la calligraphie gothique empreints dans leurs formes et dans leurs attitudes, comme pour révéler que c'était une main du moyen âge qui les avait écrites là, surtout le sens lugubre et fatal depuis tantôt deux cents ans avec les merveilleuses églises du moyen âge. Les mutilations leur viennent de toutes parts, du

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 $w^{\text{th}} w^{\text{h}}$ 
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 $y^{\text{t}}$ 
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Il y a quelques années qu'en visitant,  
sa pour mieux dire, on faisait Notre-Dame,  
l'autour de la livre trouva, dans un coin  
obscur de l'une des tours, la mot, grande et la  
mais sur la mur :

ANATKH

Les majuscules jugs, droits de  
quissamment enroulés dans la pierre  
quels signes propres à la calligraphie gothique complies  
dans leur forme en deux lignes ascendantes, comme pour  
indiquer que c'était une main du moyen âge qui les  
avait écrits là ; sur une le sous l'ogive la forme  
qu'elles uniformément, frappées fortement d'ensemble.

Il se demanda, il chercha à deviner quelle pouvait  
être l'âme en pierre qui s'avait par de là guetter  
le monde sans baster le stigmate de crime ou de malheur  
au front de la vitelle ignée.

Depuis, on a badigeonné sa gualti (pi de dais  
plus léger) le même, la l'inscription a disparu. C'en  
est ainsi qu'on agit depuis tantôt deux cents ans avec  
les merveilleuses églises du moyen-âge, la mutilations  
leur d'innocence de dedans comme de dehors. la pierre les

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les majuscules jureurs, soients de l'istust', en une  
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quels signes propres à la calligraphie gothique complètes  
dans leurs formes en deux liens entités, comme pour  
évident que c'était une main du moyen âge qui les  
avait écrits là; sur tout le deux légende sa forme et  
sont.

Transcription

Previous line

Er ist an Leib und Seele gefunden und fühlt sich in

puissamment entaillées dans la pierre, je ne sais  
quels signes propres à la calligraphie gothique

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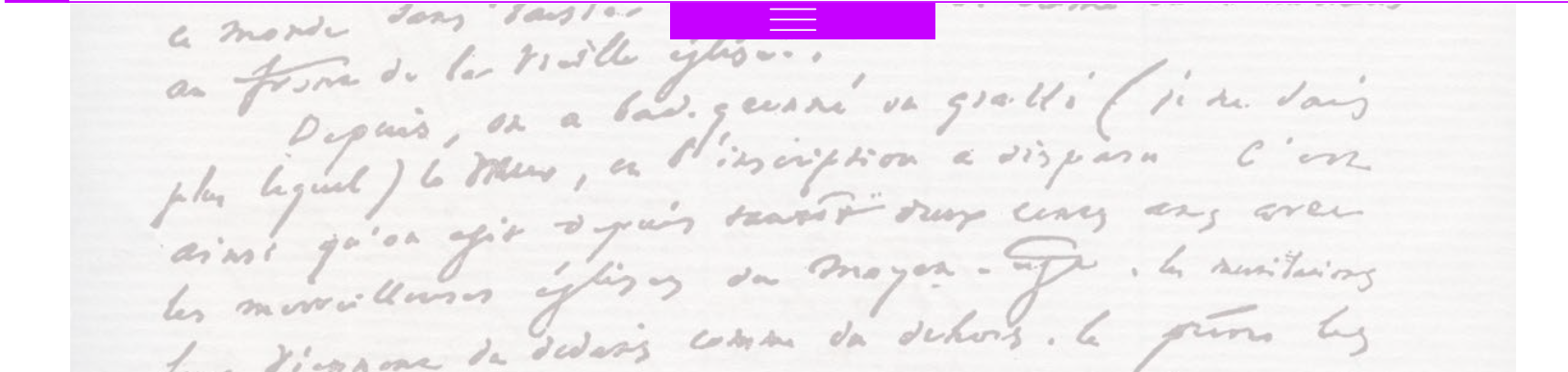
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quels signes propres à la calligraphie gothique empreintes  
dans leur formes et dans leur attitudes, comme pour

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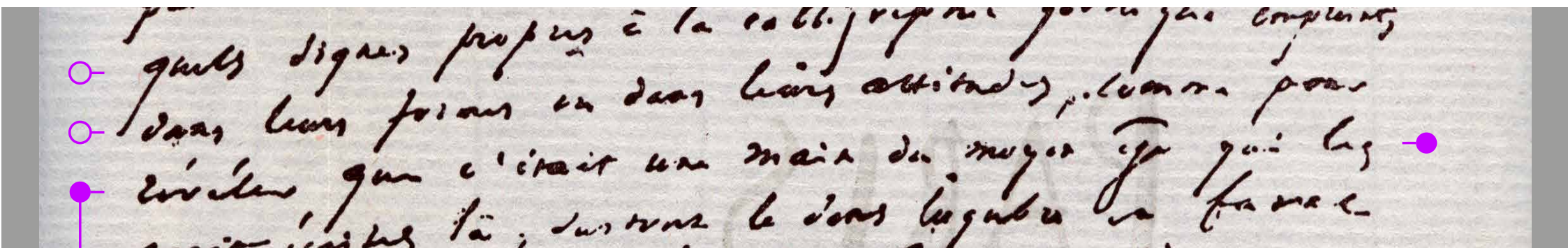
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quels signes propres à la calligraphie gothique empreints  
dans leurs formes et dans leurs attitudes, comme pour  
révéler que c'était une main du moyen âge qui les

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SAVE

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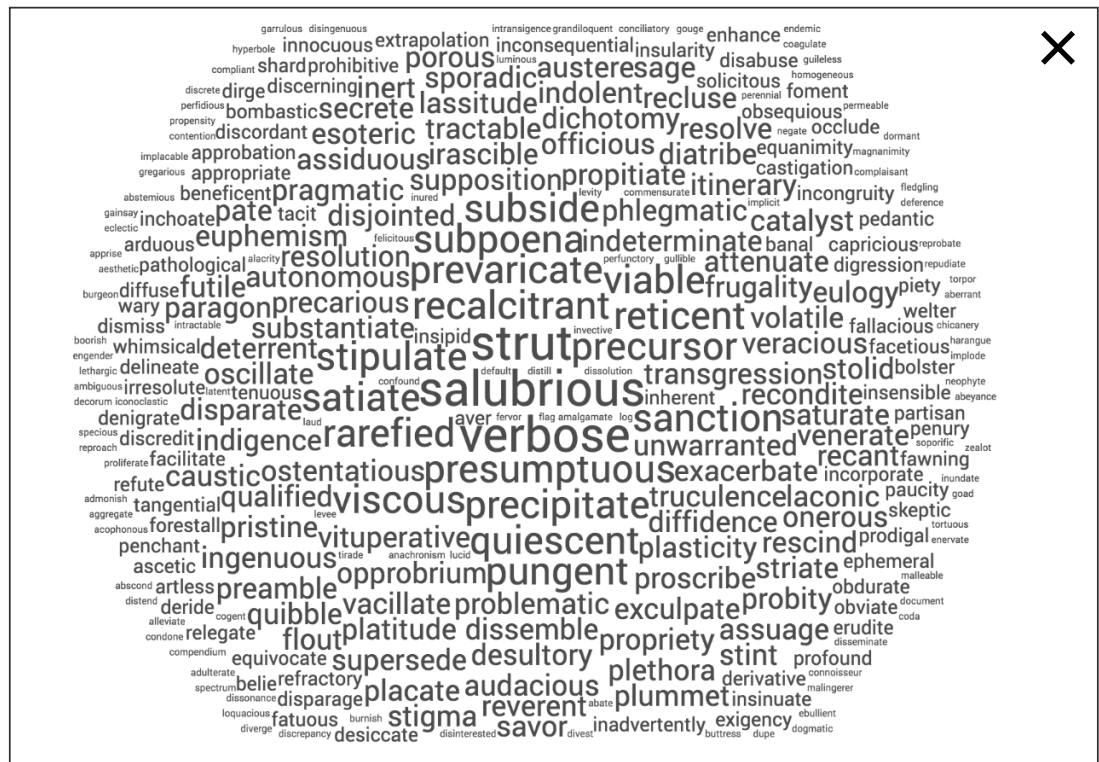
 

Transcriber ☒ ☐

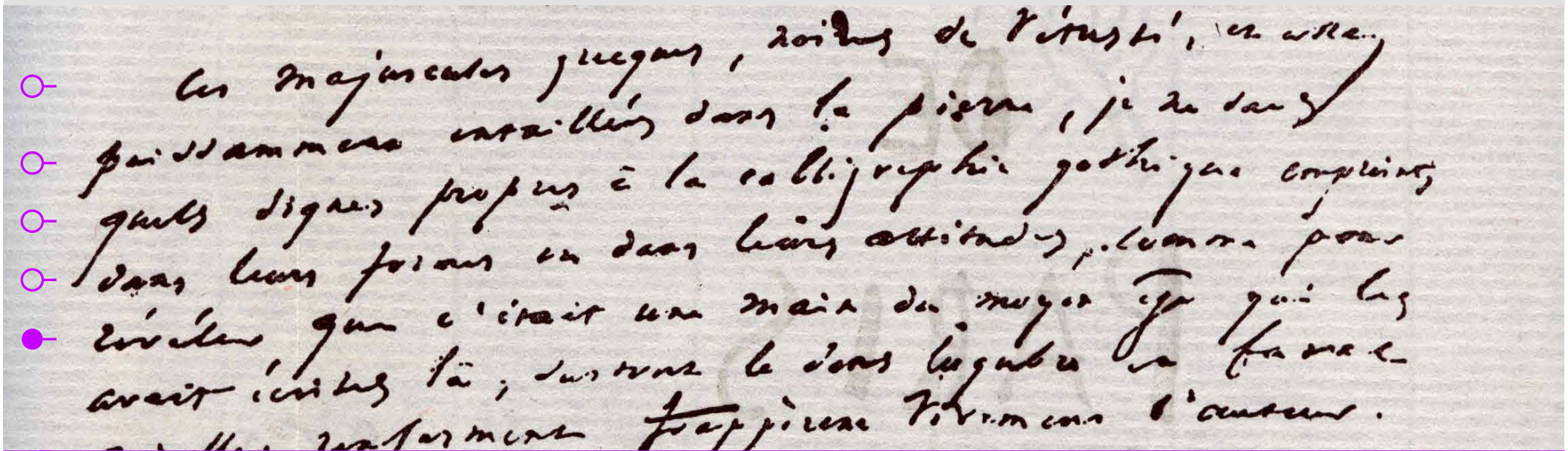


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## Transkriber



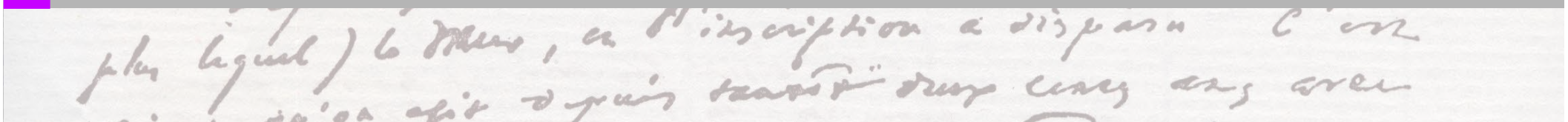




puissamment entaillées dans la pierre, je ne sais  
quels signes propres à la calligraphie gothiques empreintes  
dans leurs formes et dans leurs attitudes, comme pour  
révéler que c'était une main du Moyen-Ages qui les

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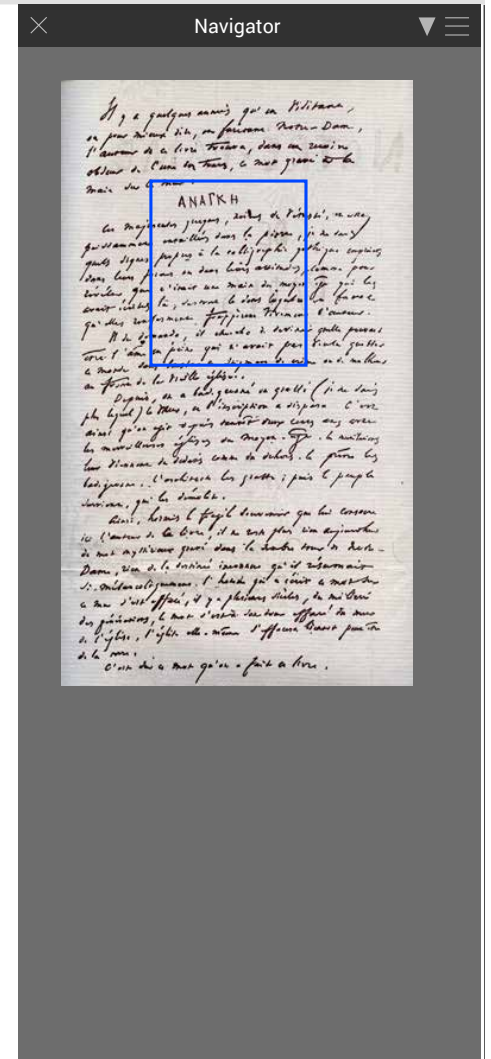
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Il y a quelques années qu'en visitant, ou, pour mieux dire, en furetant Notre-Dame, l'auteur de ce livre trouva, dans un recoin obscur de l'une des tours ce mot, gravé à la main sur le mur :



Ces majuscules grecques, noires de vétusté et assez puissamment entaillées dans la pierre, je ne sais quels signes propres à la calligraphie gothique empreints dans leurs formes et dans leurs attitudes, comme pour révéler que c'était une main du moyen âge qui les avait écrites là, surtout le sens lugubre et fatal depuis tantôt deux cents ans avec les merveilleuses églises du moyen âge. Les mutilations leur viennent de toutes parts, du dedans comme du dehors.





Chrome File Edit View History Bookmarks People Window Help Fri 17:13 Laurent Bolli

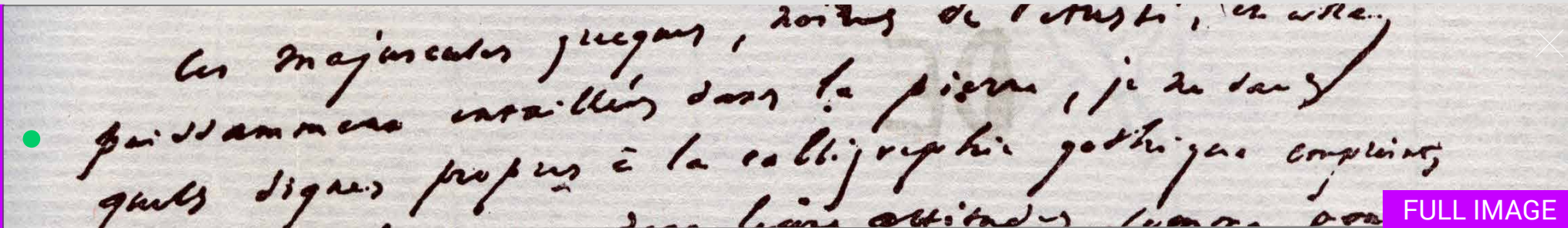
Transkribus

https://transkribus.eu/Transkribus/

TRANSKRIBUS  
SEARCH & CORRECT

First | 10 < Previous | P. XY | Next | 10 > | Last

FAQ Laurent Bolli Log out



FULL IMAGE

- Ces majuscules grecques, noires de vétusté et assez puissamment entaillées dans la pierre, je ne sais

T<sup>1</sup> T<sub>1</sub> T T<sup>?</sup> T<sup>var</sup> T<sup>xt</sup> T 30 Saved ! FULL SCREEN

Chrome File Edit View History Bookmarks People Window Help Fri 17:13 Laurent Bolli

Transkribus

https://transkribus.eu/Transkribus/

TRANSKRIBUS  
SEARCH & CORRECT

First | 10 < Previous | P. XY | Next | 10 > | Last

FAQ Laurent Bolli Log out

sa pour mieux dire, on faricane. Notre-Dame,  
 l'auteur de ce livre trouva, dans un recueil  
 obscur de l'une des tours, le mot gravé à la  
 main sur le mur :  
 ANATKH  
 Les majuscules grecques, noires de vétustés, et assez  
 faiblement entaillées dans la pierre, je ne saurais  
 comparer à la calligraphie gothique complaisante,

▲  
 ▼

obscur de l'une des tours ce mot, gravé à la  
 main sur le mur :  
 ANATKH  
 Les majuscules grecques, noires de vétustés, et assez

T<sup>1</sup> T<sub>1</sub> ₣ I T? T<sup>var</sup> T T<sup>xt</sup> T 30

FULL SCREEN

## G. Transkribus Online New GUI

TRANSKRIBUS  
ONLINE

Transcribe handwritten documents,  
manage your collections,  
share and publish your results.

LOGIN

SIGN UP



manches zu leisten verspricht. Mein zweiter Sohn  
Maximilian hat noch bis August in der Militär-  
Akademie zu Wiener-Neustadt zu verbleiben und tritt

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LOGO

LOGO

LOGO

ChromeFileEditViewHistoryBookmarksPeopleWindowHelp

Transkribus

https://transkribus.eu/Transkribus/

TRANSKRIBUS  
ONLINE

Transcribe

Manage

Publish

Advanced Mode

FAQ

Laurent Bolli  
Team XY

Connect to server

Tips: upload your own document

Transcribe

Save⌘+⇧+S

Open document...⌘+O

Open recent document▶

Close

Transcription...⌘+⇧+T

Correction...⌘+⇧+N

Navigator...⌘+⇧+K

Snapshot Keyboard...⌘+⇧+B

Page browser...

Preferences▶

Tips

Dictionary...

Viewing setting...

Language...

Reset tips

Workspace...

Save workspace

Manage

Collection Manager...

Users Manager...⌘+⇧+C

Create a team...

Select a collection...▶

Open recent⌘+⇧+I

Import

Statistics▶

Document Metadata & Infos

Current page

Current collection

Users...

Open statistics...

Publish

Publishing manager...

Publish⌘+P

Go to published collection...

Settings▶



ChromeFileEditViewHistoryBookmarksPeopleWindowHelp

Transkribus

https://transkribus.eu/Transkribus/

TRANSKRIBUS  
ONLINE

TranscribeManagePublishAdvanced ModeFAQ

Laurent BolliConnect to server

Viewing Settings

Line width3pt

Line colour

Image Contrast+3

Background color

Graphic box colour

Show linesON

Interface sizeM

Er ist an Leib und Seele gesund und fühlt sich in seinem selbstgewählten Berufe ganz zufrieden und glücklich. Er verspricht bei seinen entschiedenen Fähigkeiten und seinem rastlosen Fleiße ein tüchtiger Mann zu werden; seine hervorragende Richtung ist für Geschichte und alte Literatur, in welchen Fächern er einst manches zu leisten verspricht. Mein zweiter Sohn Maximilian hat noch bis August in der Militär-Akademie zu Wiener-Neustadt zu verbleiben und tritt

Tools

Editing tools

Automation tools

Viewing tools

Page# 2

Name: 004674\_000003\_32232323.jpg

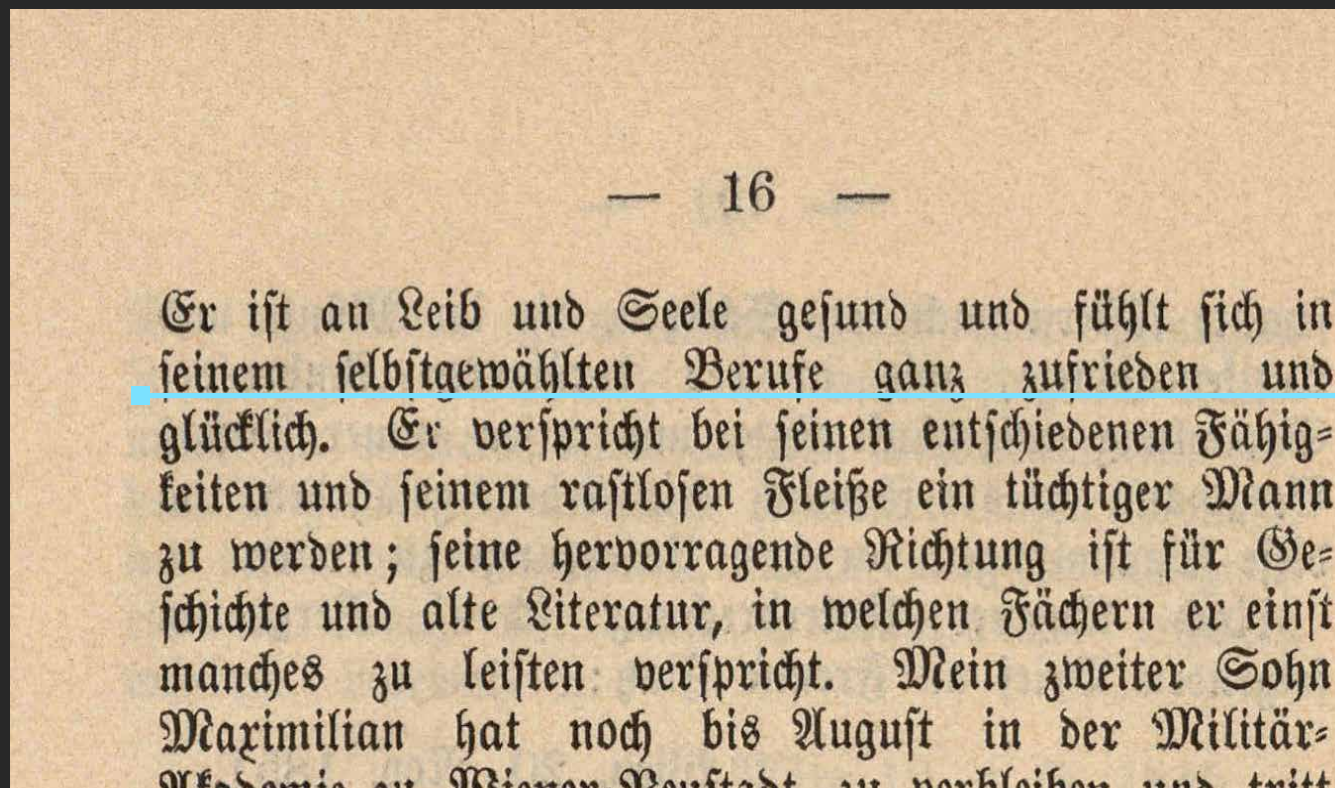
Status: NEW

Page browser

16







Transcription

Previous line

Er ist an Leib und Seele gesund und fühlt sich in

seinem selbstgewählten Berufe ganz zufrieden und

T<sup>1</sup> T<sub>1</sub> T T<sup>var</sup> T<sup>xt</sup> T 12 SAVE



Background opacity

80%

— 16 —

Er ist an Leib und Seele gesund und fühlt sich in  
seinem selbstgewählten Berufe ganz zufrieden und

seinem selbstgemählten Berufe ganz zufrieden und

PREVIOUS

NEXT

T<sup>1</sup>

T<sub>1</sub>

T

T

T?

T<sup>var</sup>

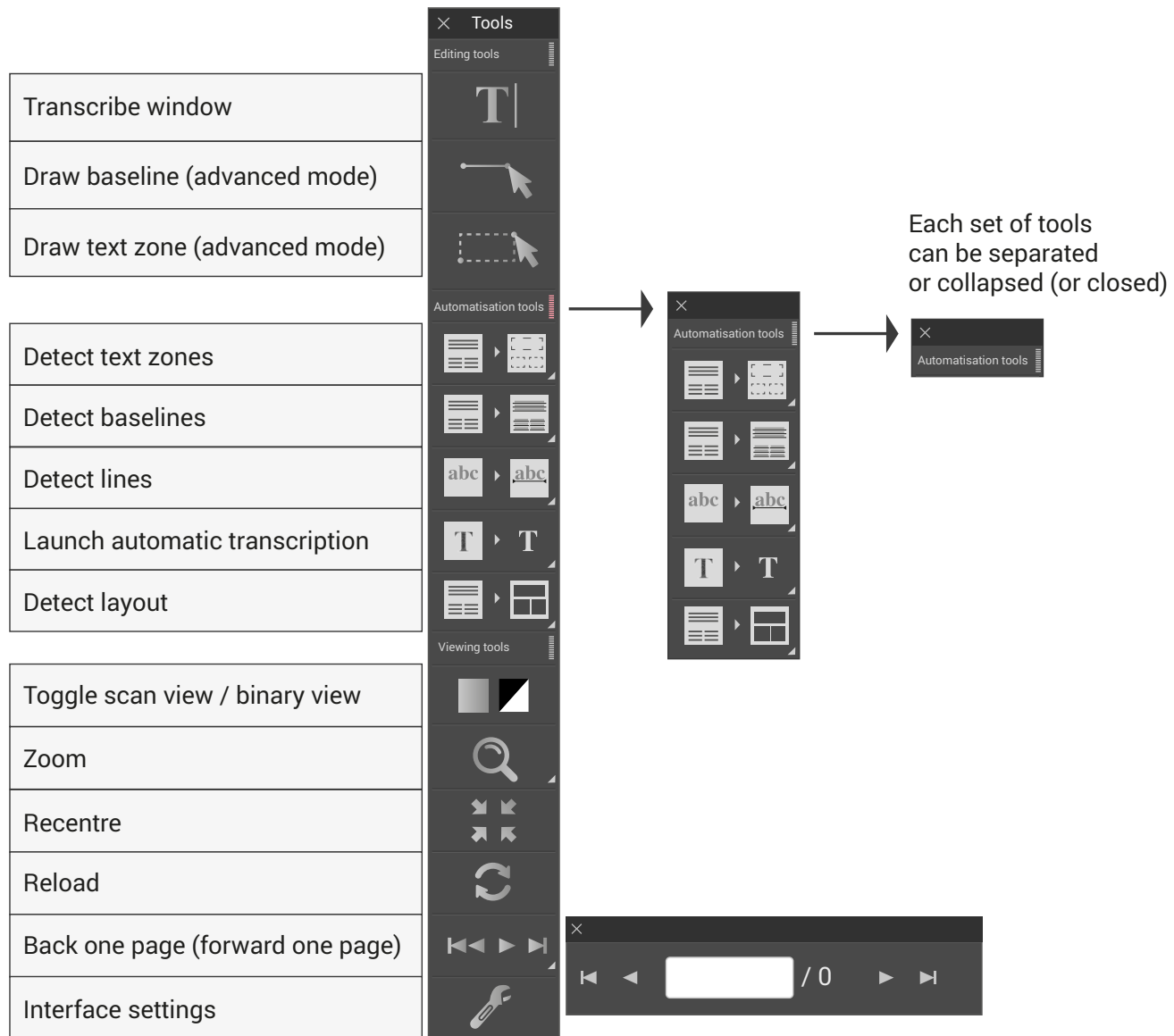
T<sup>xt</sup>

tT

20

SAVE

manches zu leisten verspricht. Mein zweiter Sohn  
Maximilian hat noch bis August in der Militär-  
Akademie zu Wiener-Neustadt zu verbleiben und tritt  
dann, wie ich hoffe, als Officier in die kaiserliche  
Armee. Meine treffliche Frau Louise ist recht gesund  
und erzieht ihre beiden Kinder zu frommen, braven



Tools

Layout detection

☐ Regions
☐ Lines
☐ Baselines

Detect

Text recognition

Run text recognition

Structure analysis

☐ Page #
☐ Footnotes
☐ Header

Run structure analysis

Compute accuracy

Reference: Choose... ☐ Use current

Hypothesis: Choose... ☐ Use current

Compare

*informations about Tools*

Documents Metadata & Infos

Loaded document:

Current collection:

Current filename:

Current image URL:

Current transcript URL:

Document metadata

Editorial declaration

Virtual keyboard

Edit...

Display: Custom




-	-	±	#	_	[	]	{	}	<	>	≤	≥	/	\	~	ˆ	˜	˘	˙	˚	˛
~	*	ˆ	˜	˘	˙	˚	˛	˜	˘	˙	˚	˛	˜	˘	˙	˚	˛	˜	˘	˙	˚
˙	˚	˛	˜	˘	˙	˚	˛	˜	˘	˙	˚	˛	˜	˘	˙	˚	˛	˜	˘	˙	˚
Nº	¼	½	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾	¾
-	-	±	#	_	[	]	{	}	<	>	≤	≥	/	\	Æ	ˆ	˜	˘	˙	˚	˛

Collection Manager

▼ Collections

1-0 / 0 ◀ ◀ ◻ / 0 ▶ ▶ ▶

ID	Name	Role	Description





Items per page: 25 ▼   

Modify collections...

▼ Documents

◀ ◀ ◻ / 0 ▶ ▶ ▶ Documents in collection ▼

ID	Title	# Pages	Uploader	Uploaded	Collections

Items per page: 25 ▼    




Remove from collection

User manager

► Create Team

▼ Users in collection

Username	Firstname	Lastname	Role

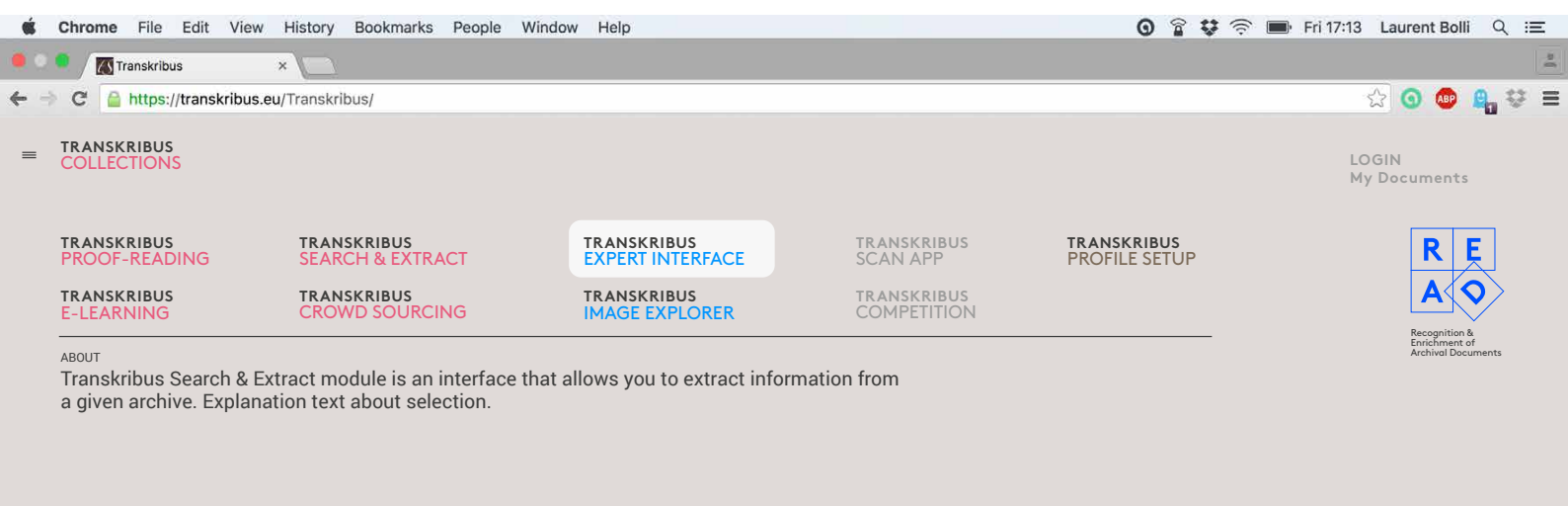
Items per page: 25 ▼    Role: ◻ ▼

 ◻

Ex: name, surname, email, etc.

Username	Name

# H. Interface Landing Page Dashboard



# MY COLLECTIONS

My last Activity

Date - Time: User X, role, operation (save) on page ID X of document ID Y in collection ID Z

RECENT ACTIVITIES

+SEARCH

Date - Time	User A	Role	Operation	Page ID X	Doc title Y	Collection title Z
Date - Time	User B	Role	Operation	Page ID X	Document ID Y	Collection ID Z
Date - Time	User C	Role	Operation	Page ID X	Document ID Y	Collection ID Z
Date - Time	User D	Role	Operation	Page ID X	Document ID Y	Collection ID Z
Date - Time	User E	Role	Operation	Page ID X	Document ID Y	Collection ID Z
Date - Time	User F	Role	Operation	Page ID X	Document ID Y	Collection ID Z
Date - Time	User G	Role	Operation	Page ID X	Document ID Y	Collection ID Z

SHOW ALL

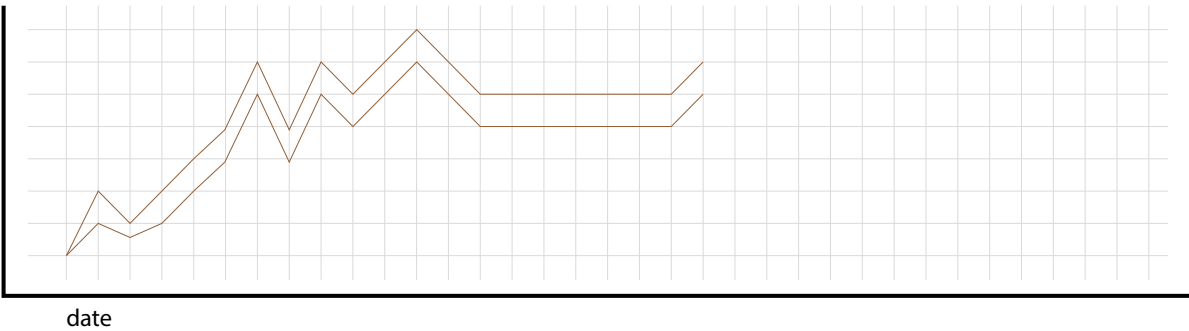
USERS STATS

+SEARCH

Name	Owner	Role	#doc	Users	SHOW STATS
Name	Owner	Role	#doc	Users	SHOW STATS
Name	Owner	Role	#doc	Users	SHOW STATS
Name	Owner	Role	#doc	Users	SHOW STATS
Name	Owner	Role	#doc	Users	SHOW STATS
Name	Owner	Role	#doc	Users	SHOW STATS
Name	Owner	Role	#doc	Users	SHOW STATS

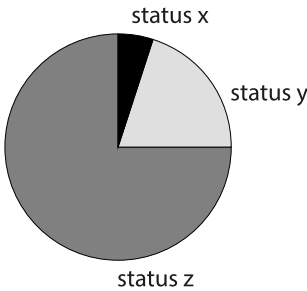
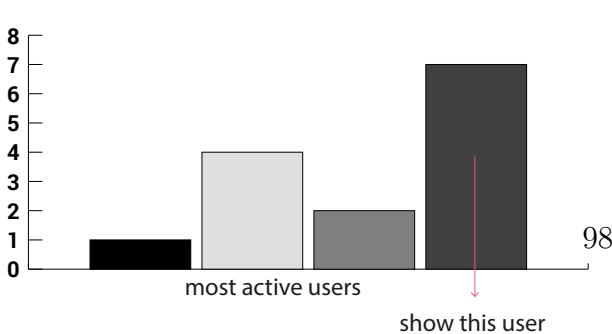
SHOW MORE

All activities in this collection | Select user

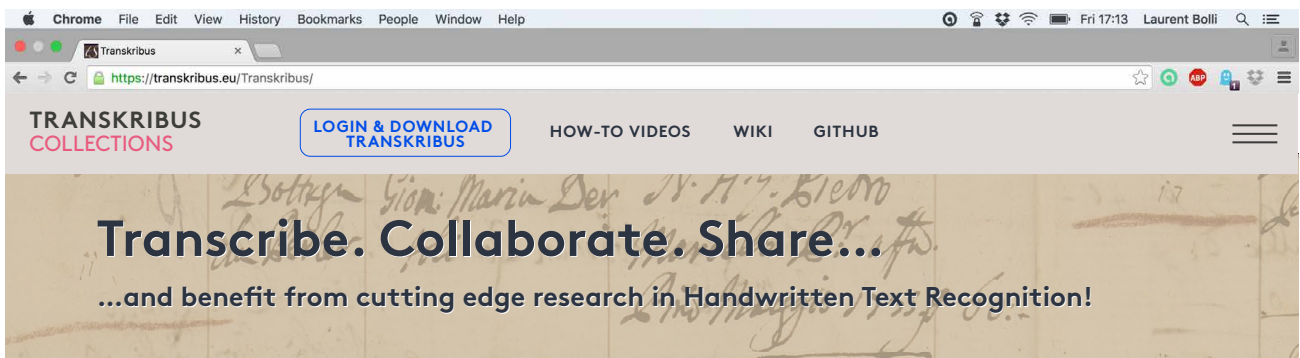


- No of saves
- No of views
- No of Jobs by type / ingesting
- Usage of clients
- No of users

Tasks 1: segmentation



For each task (4x)



[COLLECTIONS DASHBOARD](#)

[E-LEARNING APPLICATION](#)

[PAGE IMAGE EXPLORER](#)

[CROWD SOURCING COLLECTIONS](#)

[SCAN APP](#)

AVAILABLE IN 2017

## MY COLLECTIONS

Are you transcribing historical documents? Handwritten or printed, from the middle ages or from the 20th century? Would you like to do this in a highly standardized, flexible and reliable way? And do you appreciate to get support from automated tools such as Handwritten Text Recognition and Layout Analysis?



## SCHOLARS

Are you transcribing historical documents? Handwritten or printed, from the middle ages or from the 20th century? Would you like to do this in a highly standardized, flexible and reliable way? And do you appreciate to get support from automated tools such as Handwritten Text Recognition and Layout Analysis?

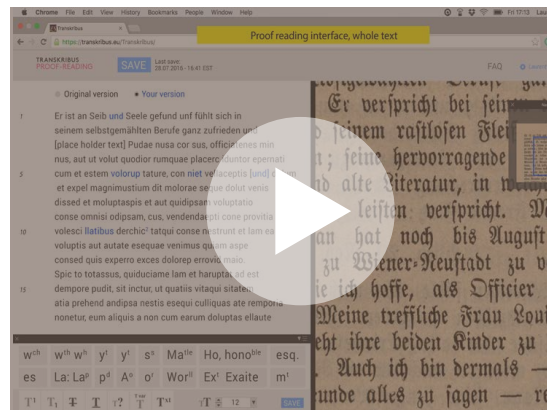


## HOW-TO

Are you transcribing historical documents? Handwritten or printed, from the middle ages or from the 20th century? Would you like to do this in a highly standardized, flexible and reliable way? And do you appreciate to get support from automated tools such as Handwritten Text Recognition and Layout Analysis?

[→ GO TO THE WIKI](#)

[PDF INSTRUCTIONS](#)





< MY COLLECTIONS

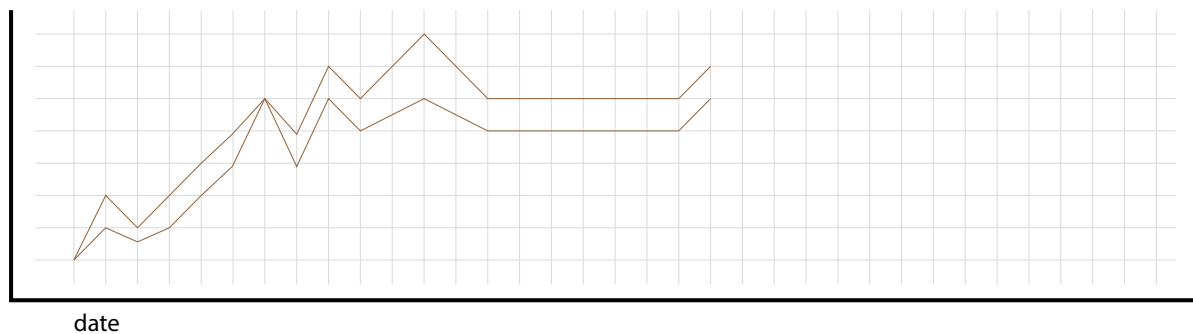
## DOCUMENTS

Date/Time: User X, role, operation (save) on page ID X

Title	Uploader	#page	Users	Area covered	Baseline Length	SHOW STATS
Title	Uploader	#page	Users	Area covered	Baseline Length	SHOW STATS
Title	Uploader	#page	Users	Area covered	Baseline Length	SHOW STATS
Title	Uploader	#page	Users	Area covered	Baseline Length	SHOW STATS
Title	Uploader	#page	Users	Area covered	Baseline Length	SHOW STATS
Title	Uploader	#page	Users	Area covered	Baseline Length	SHOW STATS
Title	Uploader	#page	Users	Area covered	Baseline Length	SHOW STATS

SHOW MORE

All activities in this collection | Select user



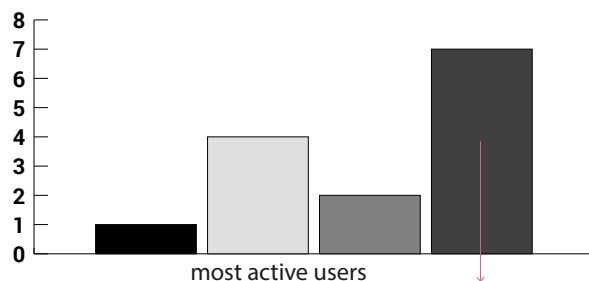
No of saves

No of views

No of Jobs by type / ingesting

Usage of clients

No of users





## I. Transkribus Interface Map

# MAP OF TRANSKRIBUS INTERFACES

Version 1.0  
PROJECT READ - June 2016  
L. Bolli - EPFL / DHLAB

