

Acknowledgement and Citation Guidelines

I. Acknowledgement Guidelines

This section provides guidelines on how to acknowledge the use of Transkribus in various publications, as well as outlining the scholarship acknowledgement requirements.

A. Acknowledgment Guidelines for Public, Press and Online Use

A clear acknowledgement should be provided whenever Transkribus is mentioned, discussed, or featured in blogs, articles, social media, project websites, or other non-academic formats, including audio and video content. We recommend including the following details:

- Explicit mention of **Transkribus by READ-COOP**, rather than generic terms like "AI text recognition software".
- The specific Transkribus functions and models used.
- The date of application/access.
- Links to both the Transkribus main website (<u>www.transkribus.org</u>) and the Transkribus platform (<u>app.transkribus.org</u>).
- Screenshots or screen recordings of the platform may be used freely. When doing so, make sure to include a descriptive caption that clearly credits Transkribus and explains which feature is being shown.
- Only state usage or customer status if it is accurate, and make sure that the platform is represented correctly.

This acknowledgement helps with tracking the impact of Transkribus and provides readers with a direct path to the tools used. For any uses beyond editorial or informational purposes, please contact the Transkribus team via our Press & Media page for more information.

B. Scholarship Acknowledgement Requirements

1. Standard Acknowledgement Language



Recipients of the Transkribus scholarship are required to include an acknowledgement in the following locations:

- For Monographs and Dissertations: *Preface or Acknowledgements section:* "The research underlying this work was supported by [Transkribus Scholarship #, by READ-COOP SCE]. I am grateful for this funding, which enabled the digital analysis and transcription work that forms a central component of this study."
- For Journal Articles: *First footnote or acknowledgements section:* "This research was supported by [Transkribus Scholarship #, by READ-COOP SCE]. The digital methodologies employed in this study were made possible through this funding."
- For Conference Papers and Digital Editions: *Acknowledgements or credits section:* "Research supported by [Transkribus Scholarship #, by READ-COOP SCE]. , which facilitated the digital humanities approaches employed in this work."
- Other related output (Blog, online article, etc.): *In "About the Author" or "Acknowledgements" section or at the very end of the post:* "This work was was supported by [Transkribus Scholarship #, by READ-COOP SCE], which helped make the digital analysis and research for this piece possible."

N.B. Any other derivatives should include a similar acknowledgement.

2. Scholarship Contextual Adaptations

Where appropriate, recipients may expand these acknowledgements to specify particular aspects of the work enabled by the funding, such as "the systematic digitisation and computational analysis of [specific source collection]" or "the development of custom transcription models for [particular text type/period]."

3. Visibility and Archiving of Scholarship Output

To help us track and showcase the outcomes of the Transkribus Scholarship, recipients are kindly asked to upload their completed work, particularly essays, preprints, and grey literature, on Zenodo, under the <u>ScriptNet – Text Recognition of Historical Documents community</u>. This is especially helpful for outputs that may not be formally published (e.g. student papers or project reports). For formally published works like books and peer-reviewed articles, this may not be applicable or necessary, though a metadata-only record on Zenodo is still welcome.



II. Transkribus Citation Guidelines

From Section II onwards, the guidelines focus primarily on academic publications and scholarly work. While not all sections will be relevant in every context, the guidance provided is particularly useful for research and citation purposes.

A. Platform Citation (aka: how to cite Transkribus)

Standard Format: READ-COOP SCE. Transkribus. Innsbruck: READ-COOP SCE, [date of access]. https://transkribus.eu/

Example: READ COOP SCE. Transkribus. Innsbruck: READ-COOP SCE, accessed 15 March 2024. https://transkribus.eu/

B. Model-Specific Citations

When employing specific handwritten text recognition (HTR) or layout analysis models, these should be cited separately:

Format: [Model Name], model ID [identification number]. Transkribus, READ-COOP SCE. Trained [training completion date], applied [date of use].

Example: English_Secretary_Hand_17C, model ID 45891. Transkribus, READ-COOP SCE. Trained 12 January 2024, applied 20 March 2024.

C. Methodological Documentation Requirements

All uses of Transkribus should include the following specifications:

Essential Information:

- Transkribus functions/ features and date of use
- Specific models employed with their identification numbers (ID)
- Training datasets utilised (where known)
- Any custom configurations or parameters applied
- Date range of usage for multi-phase projects

Recommended Format: "Transcriptions were generated using Transkribus (accessed March 2024) employing the [Model Name] HTR model (ID: [number], trained [date]).



The model was applied with [confidence threshold/specific settings] to [number] pages of [source description] between [start date] and [end date]."

III. Methodological Models and Algorithms

A. Underlying Technologies

Where specific machine learning models or algorithms contribute substantially to the research findings, these could receive individual mention. You can refer readers to this document for more information.

Transcription

When employing PyLaia, cite: Puigcerver, Joan. "Are Multidimensional Recurrent Layers Really Necessary for Handwritten Text Recognition?" *International Conference on Document Analysis and Recognition* (ICDAR), 2017.

When employing our Transformer-based models, you can provide the following information: This architecture uses a pure transformer model for automatic text recognition (ATR). It follows a standard encoder-decoder design and benefits from large-scale pre-training. The model is composed of two main components: First, a Vision Transformer (ViT) style encoder, which divides input text-line images into fixed-size non-overlapping patches. Positional embeddings are added to these patches before the sequence is processed by a stack of self-attention layers. Second, a Text Transformer Decoder, which is an autoregressive language model. At each step it generates a wordpiece token by attending both to the visual features produced by the encoder and to the tokens it has already generated.

Fields and Tables

When employing Field or Table models, you can provide the following information: Transkribus Fields and Table models are based on a Mask R-CNN-style architecture. This architecture is designed to classify, localise and generate a pixel-level mask for each detected entity in the document. This uses a Convolutional Neural Network (CNN) with a Feature Pyramid Network (FPN) backbone to extract a multi-scale feature hierarchy from the input image. A Region Proposal Network (RPN) then identifies candidate object bounding boxes from these features. For each candidate region parallel Region of Interest (ROI) heads perform classification, and generation of pixel level segmentation masks.

Named Entity Recognition



When employing Named-Entity-Recognition models, you can provide the following information: Transkribus Named-Entity models are based on a compact transformer encoder architecture. Input text is first tokenized into subword units, which are mapped to embeddings combined with positional information. These embeddings are processed by successive layers of multi-head self-attention and feed-forward networks.

Smart Extract

When employing Smart Extract (Core) models, you can provide the following information: The Transkribus Smart Extract (Core) model employs an encoder-decoder transformer adapted for whole document understanding. The encoder is a hierarchical vision transformer that represents images at multiple scales using shifted-window self-attention. This produces localized as well as global visual embeddings that capture both text and layout structure. A transformer decoder then autoregressively generates text tokens, attending to these hierarchical features alongside its own prior outputs. By introducing special tokens, the model is able to represent not only plain transcription but also structured outputs such as named entities, key-value fields, and layout elements.

When employing Smart Extract (Deep) models, you can provide the following information: Smart Extract (Deep) employs an end-to-end encoder-decoder architecture to understand whole documents. A Fully Convolutional Network (FCN) encoder processes the entire image, generating visual features that are enriched with 2D positional encodings that retain spatial information. A transformer decoder then autoregressively generates an output sequence, using a character-level attention mechanism, outputting text combined with special tokens to capture structured outputs.

B. Training Data Citations

Where training datasets are identifiable and have been instrumental in model performance:

Format: [Dataset Name]. [Creator/Institution]. [Location]: [Repository], [Year]. Used in training of [Model Name] (applied through Transkribus [version], [date]).



IV. Collaborative and Iterative Usage

A. Multi-Version Projects

For research projects spanning extended periods employing different Transkribus versions:

"This project utilised Transkribus provided by READ COOP SCE across multiple phases: initial transcription employed version [X] with [Model A] (March-June 2023), whilst revised analysis incorporated version [Y] with [Model B] (February-April 2024). This temporal progression reflects both the evolution of available models and improvements in platform functionality relevant to [specific research requirements]."

B. Collaborative Projects

For team-based research:

"Transcription was undertaken collaboratively using Transkribus provided by READ COOP SCE, with [number] researchers employing [model names] between [dates]. Standardisation protocols ensured consistency across [collection size/scope], with final verification completed using [version number] in [month/year]."

N.B. It is best practice to name all contributors to a project. A person's contribution level determines if they should be listed as a co-author (for significant intellectual contributions) or in the acknowledgements section (for other valuable support).

C. Quality Control Documentation

"Transcription accuracy was assessed through [sampling methodology], with manual verification of [percentage/number] of automatically generated transcripts. Confidence scores below [threshold] prompted manual review, resulting in [accuracy rate] overall reliability for [specific text types/periods]."

V. Temporal Specificity and Scholarly Protection

A. Version Documentation Rationale

Given the rapid development of Transkribus functionality, precise temporal documentation serves both reproducibility and scholarly protection. Recipients should



emphasise that limitations observed during their research period may not reflect current platform capabilities.

Suggested Disclaimer Language: "The analysis presented here reflects the capabilities and limitations of Transkribus as implemented during [specific time period]. Subsequent developments in ATR technology and model training may enable approaches not available during this research phase."

B. Future-Proofing Academic Claims

When discussing platform limitations or comparative tool assessments:

"As of [date], Transkribus [specific limitation]. This temporal qualification acknowledges the continuing development of the platform and associated models."

VI. Digital Humanities Methodology Section

A. Comprehensive Documentation Template

For inclusion in methodology sections:

"Digital transcription employed Transkribus (version [X], READ COOP SCE) accessed between [dates]. The [Model Name] ATR model (ID: [number], trained [date]) was selected based on [justification criteria] and applied to [corpus description]. Initial automatic transcription achieved [accuracy rate] confidence, with manual correction applied to passages below [threshold] confidence. This hybrid approach balanced efficiency with accuracy requirements appropriate to [research questions/analysis type]. The temporal specificity of these methodological choices reflects both the evolving nature of HTR technology and the particular requirements of [source type/research period] textual analysis."

VII. Bibliographical suggestions

Here we have listed some suggestions for further/future reading that might be helpful for your references in your research.

READ-COOP SCE

- Terras M, Anzinger B, Gooding P et al. The artificial intelligence cooperative: READ-COOP, Transkribus, and the benefits of shared community infrastructure for automated text recognition [version 1; peer review: 1 approved with



reservations, 1 not approved]. Open Res Europe 2025, 5:16 (https://doi.org/10.12688/openreseurope.18747.1)

Transkribus

- Sebastian Colutto e.a., 'Transkribus. A Platform for Automated Text Recognition and Searching of Historical Documents', in *2019 15th International Conference on eScience (eScience)*, 2019, 463-66, https://doi.org/10.1109/eScience.2019.00060.
- Joe Nockels e.a., 'Understanding the Application of Handwritten Text Recognition Technology in Heritage Contexts: A Systematic Review of Transkribus in Published Research', *Archival Science* 22, nr. 3 (1 september 2022): 367-92, https://doi.org/10.1007/s10502-022-09397-0.
- Guenter Muehlberger e.a., 'Transforming scholarship in the archives through handwritten text recognition: Transkribus as a case study', *Journal of Documentation* 75, nr. 5 (1 januari 2019): 954-76, https://doi.org/10.1108/JD-07-2018-0114

Development of OCR/HTR/ATR

- Romein, C.A. e.a., 'State of the Field: Digital History', *History* 105, nr. 365 (2020): 291-312, https://doi.org/10.1111/1468-229X.12969.

Comparisons between different tools/engines

- Romein, C.A., Rabus, A., Leifert, G. *et al.* Assessing advanced handwritten text recognition engines for digitizing historical documents. *Int J Digit Humanities* (2025). https://doi.org/10.1007/s42803-025-00100-0