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ESTUDIOS LITERARIOS

EDITING PREMODERN GERMAN SONG TEXTS WITHIN
THE MUSICOLOGICAL EDITION PLATFORM *E-LAUTE*.

CHALLENGES AND POSSIBILITIES

EDITAR TEXTOS DE CANCIONES ALEMANAS DE LOS SIGLOS XV Y XVI
EN EL CONTEXTO DE LA PLATAFORMA DE EDICIÓN DIGITAL MUSICOLÓGICA
E-LAUTE: DESAFÍOS Y OPORTUNIDADES

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ABSTRACT

This essay presents the musicological edition platform *E-Laute*, which is dedicated to fifteenth- and sixteenth-century lute music from German-speaking regions. It describes the edition of German texts, including both prose and song lyrics, within this musicological framework. Subsequently, the various forms of text presentation are noted, followed by an outline of the encoding schema. The challenges associated with combining an edition of music (in a special historical notation) with an edition of prose and verse texts, as well as the linking of MEI and TEI files, are discussed.

Keywords: lute music, music notation, tablature, medieval and early modern German poetry, digital edition, music and text encoding.

RESUMEN

Este ensayo presenta la plataforma de edición musicológica E-Laute, dedicada a la música para laúd de los siglos XV y XVI de las regiones de habla alemana. Describe la edición de textos alemanes, tanto en prosa como en letras de canciones, dentro de este marco musicológico. Posteriormente, se señalan las distintas formas de presentación de los textos, seguidas de un esbozo del esquema de codificación. Se discuten los retos asociados a la combinación de una edición de música (en una notación histórica especial) con una edición de textos en prosa y verso, así como la vinculación de archivos MEI y TEI.

Palabras clave: música para laúd, notación musical, tablatura, poesía alemana medieval y moderna temprana, edición digital, codificación de música y texto.

1. INTRODUCTION

E-Laute is a research project dedicated to an online edition of fifteenth- and sixteenth-century lute tablatures from the German speaking regions.¹ The project brings together questions relating to research areas in musicology, digital humanities as well as library, computer and data sciences. The research is being conducted within the *Weave* research funding initiative at seven research institutions² and funded by the Austrian Science Fund (FWF, lead agency),³ the Deutsche Forschungsgemeinschaft (DFG),⁴ and the Swiss National Science Foundation (SNSF).⁵ The platform is a part of the digital editions of the Austrian National Library (Österreichische Nationalbibliothek, ÖNB).⁶ The ÖNB provides the infrastructure for a permanent hosting of the project's various sources, files and data. In the past years, the ÖNB has developed digital editions as a main focus of its strategy (Fritze, 2019) and our project represents a first expansion of this approach to include notated music documents.

One component of the overall project is a discrete, yet complementary subproject, which focuses on the lyrics of fifteenth and sixteenth-century German songs.

¹ <https://e-laute.info/>, <https://edition.onb.ac.at/fedora/objects/context:elaute/methods/sdef:Context/get> (2025-09-05).

² <https://weave-research.net/>; University of Vienna, Department of Musicology; University of Music and Performing Arts Vienna, Web Science and Music Informatics; Austrian National Library Vienna; Vienna University of Technology, Information Systems Engineering; Ludwig-Maximilian-University Munich, Musicology; University of Bayreuth, German Medieval Studies; Schola Cantorum Basiliensis / FHNW Basel, Musicology and Performance Practice.

We would like to thank our colleagues in the project for their great support, particularly: Olja Janjuš (Ludwig-Maximilian-University Munich), Cordula Kropik (University of Bayreuth), Ilias Kyriazis (ÖNB Vienna), Kateryna Schöning (University of Vienna), Christoph Steindl (ÖNB Vienna) and Rainier de Valk (University of Vienna).

³ FWF Project no. I 6019, <https://www.fwf.ac.at/forschungsradar/10.55776/I6019>

⁴ DFG-Projektnummer 499741530, <https://gepris.dfg.de/gepris/projekt/499741530?language=en>

⁵ SNSF Grant number 207727, <https://data.snf.ch/grants/grant/207727>

⁶ <https://edition.onb.ac.at/o:ode.home>

The printed and handwritten lute tablatures from this period and region represent a hitherto neglected opportunity for a close collaboration between musicology and German literary studies, given that a significant number of the sources include lute versions of German songs. A thorough examination of these sources can therefore shed new light on new and old research questions ranging from musical and philological problems such as text underlay and the relation between text and music in general, as well as performance practices, the status of the German “Tenorlied” as a genre and a textual and musical double medium, to, finally, the various social groups (with their distinctive song cultures) that were involved in the practice and transmission of German songs in the early modern period. The reconstruction of such historical and cultural contexts will allow for a more nuanced understanding of the genre, including the specific properties of its texts and the function of the characteristic concept of love which the texts establish and perpetuate.⁷

2. THE *E-LAUTE* PROJECT

The principal objective of the *E-Laute* project is the creation of an “open access, comprehensive and interactive edition of the lute tablatures [...] of the German-speaking area between 1450 and 1550”.⁸ In the current working period, there are 42 sources of rather different nature to be studied and edited. These include printed collections of lute music and lute primers, fragments, scattered entries of lute music in manuscripts of otherwise different content, and larger and smaller lute manuscripts of varying degrees of preservation.

Tablature may be described as a type of musical notation tailored to the characteristics of a particular instrument. In comparison with stave notation, it provides instructions on how to perform physical movements in order to produce a certain sound, rather than representing musical structures in an abstract, symbolic manner. However, it would be an oversimplification to speak of a mere fingering notation. Historically, different kinds of tablature have integrated elements of mensural stave notation (or common music notation) and vice versa.

⁷ For an overview of the history of the genre as well as discussion of recent research see Dröse (2023) and Kropik and Rosmer (2024). German songs from the 15th and 16th centuries have been poorly researched in the last 70–80 years. Due to the nature of the subject, there is little research literature available in languages other than German. Even a more recent English handbook article (Hess, 2007) still categorises the texts under the term “Volkslied”, which has been deemed inappropriate for more than fifty years. The differences between Liebeslied and Minnesang, the remarkable stability and long existence of the genre system and its understanding of love (approx. 1380–1590), and how the rhetoric and styles of the text intertwine have been developed in a series of essays by Gert Hübner (Hübner, 2002, 2005, 2006, 2008, 2011a, 2011b, 2013, 2016). However, these are usually not considered as belonging closely together, and their results are therefore often received in isolation, failing to recognise the basic thesis.

⁸ See the project’s information website <https://e-laute.info> (2025-04-23).

Italian and French lute tablatures employ an iconographic representation of the fingerboard of a lute. Lines represent the five or six courses (i. e. pairs of strings) of the lute. Numbers (in Italian lute tablature) or letters (in French lute tablature) are placed along the lines to indicate the frets on which the courses are to be fingered. In German lute tablature, there are no lines, only symbols (numbers and letters). Numbers and letters indicate both the course to be played and the fret on which it must be fingered. To illustrate, a lowercase ‘a’ indicates that the player should finger the first course on the first fret, a ‘b’ that the second course should be fingered on the first fret and so forth. This requires the player to remember more symbols than in other lute notations, with each symbol carrying two dimensions of information, course and fret position (for more detailed information on lute tablature *cfr.* Dart *et al.*, 2001; Young & Kirnbauer, 2003; Lewon, 2013, 2016).

The project addresses a significant research desideratum in musicology. While lute music is generally recorded in catalogues and bibliographies (Brown, 1965; Goy *et al.*, 1991), lute music in tablature notation from 1450-1550 in German speaking regions is scarcely edited. As a result, the material is only accessible to a limited extent to musicians and musicologists and has consequently only been studied in a selective manner. Even the specific kind of musical notation, German lute tablature, has rarely been the subject of exhaustive study. While French and Italian lute tablatures were often regarded to be more efficient, easier to read and historically successful, the German lute tablature was qualified as “cumbersome” (Dart *et al.*, 2001: 3. (i)) and as a form of notation which soon became outdated. In consequence, only a few specialists and musicians study, transcribe and play from German lute tablature. The lack of scholarly editions has resulted in the further neglect of both the type of notation and the music itself, thereby perpetuating stereotypes and hasty judgments.

Considering the complexities involved in describing and understanding the notation, and the significance of the physical appearance of the sources, it becomes obvious that it is necessary to present various forms of transcriptions and editions alongside (digital) facsimiles. An online digital edition can adequately present the various sources combined with editions and transcriptions, as well as the findings of the associated research. In this context, the second main area of interest of the *E-Laute* project becomes evident. In addition to filling a gap in the existing editions of medieval and Renaissance lute music, the project also aims to advance different forms of edition, create new, more suitable ones, develop consistent rules for the edition of tablatures in MEI-XML, improve existing digital music editing tools, and design new ones, for example, for an automated transformation from one notational format to another.

The edition platform integrates facsimiles, diplomatic transcriptions, editions and encoding schemas combined with metadata. This enables the users to select different editorial presentations, compare facsimiles, transcriptions, editions and

musical examples, and to access further information. Additionally, the platform will serve as an open knowledge space, allowing other researchers and users to contribute and comment on the content (for a comprehensive overview of the project as a whole and more detailed information about IT components and data infrastructure *cfr.* Schöning *et al.*, 2025).

3. THE ROLE OF GERMAN LITERARY STUDIES AND THE TEXT EDITION (OR: WHY EDIT POETRY ON A MUSICOLOGICAL WEB RESOURCE?)

3.1. Objects, objectives and the literary-historical context

Including a philological subproject into a musicological edition is on the one hand a necessity since some sources contain texts. On the other hand our research provides the opportunity to begin with an indexing of sources and to establish new approaches in a vast yet overlooked field, the history of German song from Oswald von Wolkenstein to German Baroque literature. It may seem unconventional or far-fetched to begin research in this field with lute books, but this starting point ensures that this lyric poetry is considered from the outset in its musical, historical and social contexts, which is crucial for a profound understanding of the genre. In addition, *E-Laute* also edits printed lute primers, such as *Judenkünig* (1523) and *Gerle* (1532), which contain a substantial amount of text (for the historical context of these books and the role played by the new medium of music printing see Grosch, 2010). This necessitates the incorporation of German studies and digital text editing into the musicological project.

Accordingly, the subproject concerned with literary research has two main objectives. The first is editing the German prose from lute primers and other handbooks. The second is the edition of song lyrics. Sixteenth-century German lute tablatures contain a significant number of lute versions of German songs, but they mostly identify the piece by providing only a brief text incipit and do not record the full text of one or more stanzas (*cfr.* Kirnbauer, 2012). Consequently, the song lyrics must be edited from other sources. This permits the text and the music edition to operate rather independently from one another. Nevertheless, on the final online edition platform text and music are presented together. As both editions are created in XML –the music editions follow the guidelines of the Music Encoding Initiative (MEI, 2025), the text editions follow those of the Text Encoding Initiative (TEI, 2025)– the exchange between the edition teams is beneficial, allows mutual insights and, for example, the harmonisation of the XML elements used in music and text editions (guided by initial work in this direction pursued by TEI SIG Music).⁹ It is therefore plausible to suggest that the experiences gained from

⁹ <https://tei-c.org/activities/sig/music/>; <https://github.com/TEI-Music-SIG> (2025-04-03).

the *E-Laute* project may prove to be useful for the further development of digital text and music editions.

Providing the texts for lute versions of German songs on the *E-Laute* platform necessitates the search of concordances to these songs. The goal is to create an exhaustive documentation of concordances. This remains a difficult and time-consuming undertaking. Especially in the case of prints and manuscripts of German songs without musical notation, the lack of catalogues and bibliographies presents a challenge; research often starts by checking the registers of new and old editions.¹⁰ In contrast, the RISM database (see Keil & Pugin, 2018), the Tenorlied catalogue (Böker-Heil *et al.*, 1979) and the *VDLied* database provide an indispensable starting point for sources with musical notation respectively for songs printed in leaflets. The results are documented in the project database which contains entries for all identified and relevant sources. The entries include the sources themselves, the content of the sources (songs, musical pieces, texts), as well as additional information on the manuscripts and prints, such as rubrics, codicology, composer names etc. This is an ongoing research process, the results of which will be made available on the platform in stages. While the objective of providing an exhaustive list of concordances might appear to be an ambitious one, it is a crucial endeavour as it enables a comprehensive contextualisation of lute tablature and song poetry within the musical and social context of their time.

The availability of the texts of the songs on which the lute versions were based is also relevant to some musicological research questions and assumptions. Is the type of intabulation influenced by whether the original is a song or a textless musical piece such as a dance? Did the intabulators have the text and stanzaic form in mind when they created a lute version? Were intabulated songs actually sung to lute accompaniment? Or was an intabulated song perceived primarily as an instrumental piece? In the latter case, the incipit in a lute book would be a reference to or the name of a known polyphonic composition. In the first case, the incipit would also serve as an indication of which text had to be memorised or obtained from other sources in order to be sung with lute accompaniment. These questions can only be answered if the texts are also easily accessible on the platform.

3.2. Types of editorial presentations on the platform

A crucial first step for the subproject was to establish editorial guidelines. What kind of editions should be available alongside the facsimiles of the sources? In addition

^{10.} For an overview of a selection of song books or a specific book type see Classen (2001) resp. Holznagel (2013, 2016). However, Classen's selection as well as Holznagel's focus on a book type exclude other media, such as small prints/song leaflets or partbooks. Classen (2001) lists the content of twenty song books with a short summary of the songs but does not provide an index of the text incipits.

to the characteristics of the sources, which have to be presented adequately on the platform, the concept of the platform and the framework of the digital editions of the ÖNB were another main factor to consider. Moreover, the possible interests of the future users had to be taken into account.

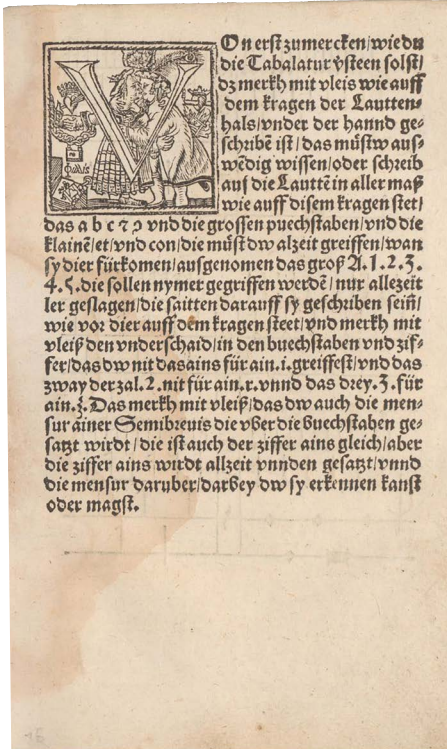
For each source, two types of edited texts are made available on the platform. In all cases, a transcription is provided. The other edited version is a slightly modernised reading version or a more heavily edited version. The transcription follows the original or digital facsimile closely. Line breaks in the transcription correspond to those in the original (if possible, depending on the size of the user's device, the window width and possible zoom options). Abbreviations are not expanded but are represented by the most appropriate Unicode character. In some, albeit rare, cases, there may be different options of expanding an abbreviation, resulting in a different grammatical form of the word and/or the meaning of the sentence; in such cases, the transcription should not determine the meaning or form. On the contrary, in the case of manuscripts and printed books that use Gothic script or type, the transcription will not imitate certain letters that were common in these scripts, such as the long-shaft Gothic-s, “f”, or the rounded form of the letter r, similar to the number two “2”. This decision represents a compromise within the *E-Laute* framework, balancing the desire to remain faithful to the sources on the one hand, and the need to make the transcription accessible for users with no experience in historical scripts on the other.¹¹ Figures 1.1 and 1.2 show a page from a printed lute source and the transcription.

In addition to the transcription, another version of the text is made available. For this second version we distinguish between prose and poetry. There is either a slightly modernised ‘reading text’ for the longer prose texts, or a more heavily edited text (“edition”) for the song lyrics. Reading text and edition differ significantly. The decision to treat prose and song texts differently arose from the work on the first primer, Hans Judenkünig’s *Ain schone kunstliche underweisung*. The syntactic structures of the early modern German prose did not allow the use of interpunctuation according to the rules of modern standard German. The historical punctuation mark of the virgule (similar to the modern slash) proved more suitable for the

^{11.} Another argument for not mimicking the mentioned Gothic letters might be that these letters are an integral component of a certain type of script contributing to its distinctive visual appearance. Once modern Roman typeface/fonts are used, either in print or on the screen of a digital device, it is not possible to imitate this distinctive appearance. The special characters lack their systematic graphic or visual function within a Roman typeface, and it would thus create an artificial mixture of two graphic systems (Füssell & Kreutzer, 1988: 169-170, though their arguments are made in the context of a critical edition). Obviously, there are valid arguments for transcriptions to imitate the specific form of characters, in terms of research interests in palaeography, the history of writing and historical linguistics. See for example the different forms of texts provided by *Der arme Heinrich digital, Referenzkorpus Frühneuhochdeutsch* (Wege et al., 2021), and by the *Wenzelsbibel digital*.

Figure 1.1.

Hans Judenkünig (1523), Ain schone kunstliche underweisung, copy in Vienna, Österreichische Nationalbibliothek, MS47356-8°, fol. 16r



Note. <https://viewer.onb.ac.at/10044BF1/>.

Figure 1.2.

Hans Judenkünig (1523), Ain schone kunstliche underweisung, fol. 16r, preliminary view of the transcription

VOn erst zumercken/ wie du die Tabalatur vñsteen solst/ dz merkh mit vleis wie auff dem kragen der Lauttenhals/ vnder der hannd geschribē ist/ das müstw auswēdig wissen/ oder schreib auf die Lauttē in aller maß wie auff disem kragen stet/ das a b c 7 9 vnd die grossen puechstaben/ vnd die klainē/ et/ vnd con/ die müst dw alzeit greiffen/ wñ sy dier fůrkomen/ ausgenommen das groß 1.2.3.

4.5. die sollen nymer gegriffen werdē/ nur allezeit ler geslagen/ die saitten darauff sy geschriben seif/ wie vor dier auff dem kragen steet/ vnd merkh mit vleiß den vnderschaid/ in den buechstaben vnd ziffer/ das dw nit dasains für ein 1. greiffest/ vnd das zway der zal .2. nit für ain .x. vñnd das drey .3. für .3. Das merkh mit vleiß/ das dw auch die mensur ainer Semibrevis die vber die buechstaben gesetzt wirdt/ die ist auch der ziffer ains gleich/ aber die ziffer ains wirdt alzeit vñnden gesetzt/ vñnd die mensur daruber/ darbey dw sy erkennen kanst oder magst.

more loosely-structured sentences (which sometimes evoke the impression of a more oral-like diction). The virgule is a rather alien punctuation mark to the modern reader. If it appears in the reading version, then consequently the spelling has to remain close to the source as well.¹² Editorial changes are therefore scarce in the reading texts.¹³ Abbreviations are expanded without editorial markings and the use

¹² It is noteworthy, that printers in the German regions used the virgule mostly in German texts printed in a Gothic type, while for Latin text in an Antiqua type the comma was used. The above-mentioned artificial mixture of signs from two different graphic/visual systems (see fn. 11) therefore applies to our text presentations, too. However, the use of the virgule correlates (and corresponds) with a grammatical feature, the text's loose syntax, not only with its visual appearance.

¹³ Certainly, further normalisations could benefit readers. For instance, capitalizing nouns, as is standard in modern German, might enhance the text's readability. However, preserving the virgule

of the letters *u*, *v*, *i*, *j* and *y* is regulated according to modern standards; *u* and *i* standing for vowels, *v*, *j* and *y* for consonants (where *y* stands for a vowel in the original, it remains in the reading text). Furthermore, we correct obvious writing or printing errors, the corrections being indicated by editorial signs on the user interface (for the XML markup see the next section).

Example 1

Hans Judenkünig, Ain schone kunstliche underweisung fol. 16r (cfr. Fig. 1.1), beginning of the text, transcription (left) and reading text (right)

VOn erst zumercken/ wie du
die Tabalatur vsteen solst/
dz merkh mit vleis wie auff
dem kragen der Lautten-
hals/ vnder der hannd ge-
schribē ist/ das mūstw aus-
wēdig wissen/ oder schreib
auf die Lauttē in aller maß
wie auff disem kragen stet/
das a, b, c, 7 9 vnd die grossen puechstaben/
vnd die
klainē/ et/ vnd con/ die mūst dw alzeit
greiffen/ wan
sy dier fürkomen/ ausgenomen das groß
A.1.2.3.
4.5. die sollen nymer gegriffen werde / nur
allezeit
ler geslagen/ die saitten darauff sy
geschriben sein/
wie vor dier auff dem kragen steet/ vnd
merkh mit
vleiß den vnderschaide/ in den buechstaben
vnd zif-
fer/ das dw nit dasains für ein .j. greiffest/

Von erst zu mercken/ wie du die Tabalatur
versteen solst/ das merkh mit vleis wie
auff dem kragen der Lauttenhals/ under
der hannd geschriben ist/ das müst du
auswendig wissen/ oder schreib auf die
Lautten in aller maß wie auff disem kragen
stet/ das .a. .b. .c. .7. .9. und die grossen
puechstaben/ und die klainen/ et/ und con/
die müst du alzeit greiffen/ wan sy dier
fürkomen/ ausgenomen das groß .A. .1. .2.
.3. .4. .5. die sollen nymer gegriffen werden/
nur allezeit ler geslagen/ die saitten darauff
sy geschriben sein/ wie vor dier auff dem
kragen steet/ und merkh mit vleiß den
underschaid/ in den buechstaben und
ziffer/ das du nit dasains für ein .j. greiffest/

while modernizing the spelling would result in a rather inconsistent presentation of the text, especially with regard to editorial principles. Retaining historical punctuation has become a standard practice in modern editions of Early New High German texts. Nonetheless, at a later stage of the project, explanations of technical terms (such as playing techniques and names of lute parts) and translations of difficult or unclear sentences could be added to assist users.

It could be argued that the transcription is not a necessary requirement: Given the minimal editorial changes in the reading text and given that the facsimile is available on the platform and can be displayed synoptically, the reading text alone would suffice. There are several reasons for still providing a transcription. First, the platform offers various forms of diplomatic transcriptions of lute tablatures that are very close to the original. The texts should therefore be presented in an analogue manner. Second, the interests and needs of future users are difficult to predict. As the platform is also aimed at interested amateur musicians, such users may have little or no experience of reading manuscripts or Gothic prints but wish to work close to the original. For these users, the transcription may be a welcome aid. Third, in the case of late medieval manuscripts which are sometimes quite difficult to decipher, the transcription may also be useful to scholars. Lastly, if encoded correctly in an XML file with a consistent encoding schema, providing a transcription and a reading text is not a huge technical effort. Using the `<choice>` element, this does not cause an unreasonable amount of additional work during the encoding process.

With regard to the song texts, a transcription and an edition is provided. In the edition, line breaks follow the verses rather than the written or printed lines of the original. We also introduce a punctuation which adheres to the modern standard syntactical rules, applied with great care. The virgule can be omitted because in poetry it is most often used in printed and manuscript sources to mark the beginning of the verse, and thus has a function different from that in prose. The function of marking the verses is covered in the edition by the line breaks. The introduction of a modern punctuation in the poetry has so far proven useful for understanding the texts. Furthermore, the spelling is slightly more modernised. For example, the double consonant spellings common in Early New High German (frequent *tt*, *mm*, *nn*, *cz*), which have no phonetic meaning or phonological function, are reduced to single consonants.

In both cases – prose texts with a transcription and slightly modernised reading version on the one hand, song texts with a transcription and a more heavily edited version on the other – the users will be able to select one of them in comparison with a digital facsimile.

Figure 2

Broadsheet (c. 1510) containing the song 'Wo soll ich mich hinkehren', München, Bayerische Staatsbibliothek, Mus. pr. 156/17, detail, stanzas 1-3



Note. Source: Bayerische Staatsbibliothek, Munich. Mus. pr. 156/17.

Example 2.1.

Transcription of the Song "Wo soll ich mich hinkehren", text of stanzas 1-3 (cfr. Fig. 2)

Ein freyes lyed. Von einem freyen schlemer mit vier stymen.

Wo soll ich mich hyn kôren/ ich thumes brüderlein/ wie soll ich mich ernere/
mein gut ist vil zu klein/ als ich ein we
sen han/ so muß ich darvon/ was ich soll hewer verzeren das hab ich verdt
verthan.

¶ Ich byn zu frû geporen/ wo ich hewer hyn kum/ mein glück kumbt mir erst
morge/ het ich das kayserthum/ dar
zu den zol am reyn/ vnd wer venedig meyn/ so wer es als verloren es müst vers-
chlemet seyn.

¶ So will ichs doch nit sparen/ vn̄ ob ichs als verzert/ vnd will darumb nit sor-
gen/ got beschert mir morgen mer/
was hülffs das ichs lang spar/ vileycht verlûr ichs gar/ solt mirs eyn dieb auß tra-
gen/ es rewet mich ein jar.

Example 2.2.

Edition of the song "Wo soll ich mich hinkehren", text of stanzas 1-3 (cfr. Fig. 2)

Ein freies lied. Von einem freien schlemer mit vier stymen.

Wo soll ich mich hin kören,

ich tumes brüderlein?

Wie soll ich mich ernerren?

Mein gut ist vil zu klein!

Als ich ein wesen han,

so muß ich darvon.

Was ich sol heuer verzeren,

das hab ich verdt vertan.

Ich bin zu frü geporen.

Wo ich heuer hin kum,

mein glück kumbt mir erst morgen.

Het ich das kaisertum,

darzu den zol am Rhein

und wer Venedig mein,

so wer es als verloren,

es müst verschlemet sein.

So will ich's doch nit sparen,

und ob ich's als verzert;

und will darumb nit sorgen,

got beschert mir morgen mer.

Was hülf's das ich's lang spar,

vileicht verlür ich's gar;

solt mir's ein dieb auß tragen,

es reuet mich ein jar.

3.3. The encoding schemas and encoding music within TEI-XML

The three different types of edited texts are encoded in TEI-XML according to the TEI guidelines (TEI, 2025) and created using the Oxygen XML editor. The ÖNB provides templates and XML schemas that have been developed in previous edition projects. The XML schemas have been adapted to meet the needs of describing and encoding the *E-Laute* sources. This is an ongoing process. While the XML schema for the prose texts will remain relatively stable, that for the song texts is still evolving. The handbooks and lute primers to be edited within *E-Laute* have been defined from the beginning of the project, thus enabling an overview of their characteristics. The books are also quite similar in terms of fonts, illustrations and layout. The XML schema we used and adapted for Judenkünig (1523) will therefore be suitable for the other primers and handbooks, too.

As outlined in section 3.1, the sources for the edition of the songs had to be identified and are still being determined. In the course of our research, we have encountered polyphonic printed songbooks in the form of partbooks for each voice, small booklets containing two or three songs, broadsheet prints, and manuscripts of very different types with and without musical notation. Editing and annotating song texts from such diverse sources requires adaptation of the XML schema, as new phenomena may require the inclusion of new TEI elements and attributes. The XML schemas and the editorial decisions they reflect will also be accessible on the platform.

During the course of the project, the linking of MEI and TEI files has become an important issue. In general, either the transcription and the reading text or the transcription and the edition are encoded in the same XML file, using the `<choice>` element with its children `<orig>` and `<reg>`. The two different versions can be rendered separately on the platform via an XSL transformation.

For standard editorial changes, additions or deletions, the TEI Guidelines provide a more than ample set of elements (TEI, 2025: ch. 3.5, ch. 12.3).¹⁴ As previously stated, no changes are made in the transcriptions with regard to the meaning or the (in)correctness of the source. Editorial changes are limited to the reading texts or editions. Errors that are apparent in the source text are marked with the `<sic>` element. The corrections, marked as `<corr>`, are rendered in the reading text or the edition in italics. Normalisations of spelling are not marked on the interface but are annotated in the XML files with the `<reg>` element. Similarly, the addition of modern punctuation is not marked on the user interface, nonetheless all added punctuation is encoded with the `<supplied>` element. This makes it possible to distinguish between punctuation added by the editors ("`<pc>`" is used as child of "`<supplied>`": `<supplied><pc>.</pc></supplied>`) from punctuation in the sources ("`<pc>`" element only: `<pc>.</pc>`).

Added letters and words are also annotated with the `<supplied>` element, for example in case of illegibility or if the editors consider a sentence or a verse to be incomplete. Attributes are added to the `<supplied>` element for further differentiation and enabling different renderings. Added words are rendered in italics, as are single letters whose reading is doubtful. Letters whose reading is (almost) certain remain upright. If the editors believe that one or more words or a line has erroneously been written or printed twice and the duplication is to be deleted in the edition or reading text, these words will be marked with the `<surplus>` element. On the user interface, angle brackets "`< >`" appear in place of the words, to indicate the editorial omission. Where there are gaps due to physical damage and the text cannot be reconstructed, the gap is annotated with the `<damage>` element and rendered as square brackets "`[ ]`".

¹⁴ <https://tei-c.org/release/doc/tei-p5-doc/en/html/CO.html#COED>, <https://tei-c.org/release/doc/tei-p5-doc/en/html/PH.html#PHST> (2025-04-03).

Figure 3

Hans Judenkünig (1523), Ain schone kunstliche underweisung, fol. 18r and 18v: instructional text followed by three pieces in tablature notation



Note. <https://viewer.onb.ac.at/10044BF1/>.

A first, somewhat demanding technical challenge was to design the TEI file in such a way that the instructional text could later be brought together with the pieces of music encoded in other files according to MEI. In Judenkünig (1523), for instance, pages with instructional text are followed by pages of one or more pieces of music, as shown in figure 3.

In addition, there are symbols of German lute tablature that appear within the prose or within tables. Figure 1.1 (see above) shows the tablature characters used within the text in the lines 10, 12, 13, 18 and 19.

The TEI guidelines provide the <notatedMusic> element as a kind of placeholder in TEI files where music is notated in a source. Where the <notatedMusic> element appears in the code, the different versions of transcriptions and editions of the music generated from the MEI-XML files can later be displayed. The various musical editions (diplomatic transcriptions and edited versions in different lute tabulatures

Figure 4

Snippet of the TEI-XML code, <notatedMusic> for the pieces in tablature

```

8      <pb n="18v" facs="43"></pb>
9      <div xml:id="Jud_1523-2_n10">
10         <notatedMusic>
11             <desc>Lautentabulatur <title>Wo soll ich mich hin
12 <choice><orig>kere</orig><reg>kere<ex>n</ex></reg></choice> ich
12 armes</title></desc>
13         </notatedMusic>
14     </div>
15     <div xml:id="Jud_1523-2_n11">
16         <notatedMusic>
17             <desc>Lautentabulatur <title>Mag ich
17 <choice><orig>vnglück</orig><reg>unglück</reg></choice> nit
17 widerston.</title></desc>
18         </notatedMusic>
19     </div>

```

Note. Source: E-Laute platform.

as well as common Western music notation) are encoded in MEI-XML files. Keeping in mind users who may wish to perform individual pieces, separate MEI-XML files are encoded to represent each individual musical piece, while the TEI-XML represents the print or manuscript as a whole. The correct linking between the TEI and MEI files is ensured by a <ptr> element and the uniform use of xml:ids across the whole project, with a predetermined mapping to URIs in a Linked Data knowledge graph. The technical solutions and the surface presentation are currently being developed by the team at the Austrian National Library.¹⁵

Part of the <notatedMusic> element is a short description in the <desc> element, also containing the title of the piece. Both the title and the description can be rendered later instead of, or together with, the sheet music, using the title's original spelling or a normalised one. Figure 4 shows that <notatedMusic> is a child of a <div> element. These <div> elements are given an XML identifier (ID). The value of the xml:id – in the figure 4 “Jud:1523_2_n10” and “Jud_1523-2_n11” – matches the ID of the entry in a bibliographic database maintained by the project. The MEI files use the same IDs, too, supplemented by different suffixes for the different type of notation that the files encode. On the platform, users will be able to choose which kind of editorial presentation of the music they want to see. Experts may prefer a diplomatic transcription (or just the facsimile), amateur lutenists may prefer seeing a more familiar kind of notation (e. g. French or Italian lute tablature), and a music historian may choose an edition in Common Western Music Notation to

¹⁵ A first glance of the platform shall be online since september 2025.

get a first impression of the composition. The set of encoding elements provided by the TEI and MEI supports the interlinking of these representations, allowing to bring together more editorial forms and information than a printed edition. Moreover, it allows users to choose according to their specific needs, interests and research questions.

Despite this, there is a risk that the information and options may appear overwhelming to an inexperienced user. In order to prevent users from becoming disoriented, a user-friendly design and a visually clear structure of the platform is crucial. This is ensured by the ÖNB's infrastructure and framework for digital editions, as well as the experience gained from previous digital editions projects. Nevertheless, the compilation and linking of different sources obliges us to present concise and precise information to users about what they are seeing and reading. It is important for a user to be aware that, for example, the song texts are not actually part of the lute book they are studying or playing, but that the texts are provided from other sources. On the other hand, a literary scholar reading the song texts should be informed that this text is recorded elsewhere as part of a composition. Apart from this, users need to be informed about the editorial decisions, what kind of linguistic or musical text they are reading, who is responsible for the edition and how it has been encoded. Thus, *E-Laute* must be conceived as a knowledge platform and not just a digital edition. We need to offer not only the necessary information about the sources (and their relation to one another), but also information on the editorial and technical decisions.

In the TEI-XML files we have marked the tablature symbols that appear in the text as `<notatedMusic>`. Strictly speaking, every German lute tablature symbol is a form of notated music. Moreover, the annotation allows the tablature symbols to be searched in the code. Unlike the musical pieces, they are also marked as special characters with the `<g>` element in the text part of the XML file and defined and described with the `<glyph>` element in the TEI header as shown in figures 5.1 and 5.2.

If a standardised display format for the German lute tablature symbol already exists within the specification of the Standard Music Font Layout (*SMuFL*), it is imported. If not yet available, a Unicode character is used. In Figure 6 the letters a, b, c (line 4) an A (line 6) are imported from *SMuFL*. For the numbers (line 6) a standard character is used, for the et- and con-abbreviations (line 4), which were used as German lute tablature symbols, a Unicode character.

Figure 5.1

Snippet of the TEI-XML code: annotations of German lute tablature symbols as *<glyph>* in the *<header>*

```

5      <encodingDesc>
6      <charDecl>
7      <glyph xml:id="luteGermanAUpper">
8      <localProp name="Tab-A" value="Buchstabe A als
9 Zeichen der deutschen Lautentabulatur"/>
10     <desc><ref target="https://smufl-browser.edirom.
11 de/luteGermanAUpper.xml"/></desc>
12     </glyph>
13     <glyph xml:id="luteGermanBUpper">
14     <localProp name="Tab-B" value="Buchstabe B als
15 Zeichen der deutschen Lautentabulatur"/>
16     <desc><ref target="https://smufl-browser.edirom.
17 de/luteGermanBUpper.xml"/></desc>
18     </glyph>

```

Note. Source: E-Laute platform.

Figure 5.2

Snippet of the TEI-XML code: annotations of German lute tablature symbols as *<g>* within *<notatedMusic>* in the *<text>*

```

1 greiffest<pc>/</pc> <choice><orig>vnd</orig><reg>und</reg></choice> das
2     <lb>zway der zal .2. nit für ain .<notatedMusic><seg><g ref="
3 #luteGermanRLower"/></seg></notatedMusic>.
4 <choice><orig>vnnd</orig><reg>unnd</reg></choice> das drey .3. für
5     <lb> .<notatedMusic><seg><g ref="#luteGermanZLowerSpecial"
6 >g</g></seg></notatedMusic>. Das merkh mit vleiß<pc>/</pc> das
7 <choice><orig>du</orig><reg>du</reg></choice> auch die <choice><orig>men-

```

Note. Source: E-Laute platform.

Figure 6

German lute tablature symbols in the reading text of *Judenkünig* (1523), fol. 16r (cfr. Fig. 1.1), preliminary view

Von erst zu mercken/ wie du die Tabalatur versteen solst/ das merkh mit vleys wie auff dem kragen der Lauttenhals/ under der hannd geschriben ist/ das müst du auswendig wissen/ oder schreib auff die Lautten in aller maß wie auff disem kragen stet/ das .a. .b. .c. .7. .9. und die grossen puechstaben/ und die klainen/ et/ und con/ die müst du alzeit greiffen/ wan sy dier fürkomen/ ausgenommen das groß .x. .1. .2. .3. .4. .5. die sollen nymer gegriffen werden/ nur allezeit ler geslagen/ die saitten darauff sy geschriben sein/ wie vor dier auff dem kragen steet/ und merkh mit vleiß den underschaid/ in den buechstaben und ziffer/ das du nit das ains für ein i greiffest/ und das zway der zal .2. nit für ain .x. unnd das drey .3. für .3. Das merkh mit vleiß/ das du auch die mensur ainer Semibrevis die uber die buechstaben gesatzet wirdt/ die ist auch der ziffer ains gleich/ aber die ziffer ains wirdt allzeit unnden gesatzet/ unnd die mensur daruber/ darbey du sy erkennen kanst oder magst.

Note. Source: Österreichische Nationalbibliothek. (1523/2025).

3.4. Encoding text in MEI files and linking text and music

The above section describes our approach to encoding predominantly textual documents incorporating musical symbols. However, we must also grapple with the inverse situation, how to best represent textual information within musical contexts. Of course, music notation documents very commonly include textual representations, and so our project is hardly alone in facing this issue.

The MEI Guidelines contain extensive advice on encoding textual content in MEI (2025: ch. 9),¹⁶ scoped to include representations of paratext (front and back matter); textual directives within the music notation suggesting manners of performance relating, e. g., to tempo, dynamics, structure, expressivity, affect or technique; and vocal texts, i. e. lyrics, which may appear either written underneath each system of music notation, separated into syllables matching the position of the corresponding score position in which they are to be performed; or alternatively (or additionally), as distinct textual blocks below the music notation. The two approaches are commonly mixed to represent a first stanza situated ‘within’ the music and subsequent stanzas beneath it. The scope of MEI’s support for textual content is intentionally limited to such representations of text as part of music notation documents, and the MEI Guidelines explicitly recommend adopting text-specific encoding formats with embedded MEI markup for deeper encodings of text.

Within the *E-Laute* context, however, we face the problem of handling texts within two conflicting modalities: once, as underlaid syllables connected to score positions, primarily intended to guide performance; and again, as lines of verse and stanzas subject to literary studies. These uses are technologically at odds with one another, as the MEI representation is concerned chiefly with the performance case, while TEI provides more appropriate representations for literary analysis, but cannot express performance aspects, such as association with score positions. Following the recommendation of the MEI Guidelines by embedding the music within a textual encoding, e. g., by customizing a TEI schema to allow MEI-namespace elements underneath `<notatedMusic>`, would allow the combination of textual and musical information within one document, but would still require duplication of the texts due to the mutually incompatible models employed by the two encoding standards.

Our solution acknowledges that the issue of duplication is somewhat unavoidable and maintains the separation of musical and text-analytical aspects in separate files, using MEI and TEI respectively. However, we make use of the affordances of hypermedia to interconnect these representations, in order to provide our users with unified access to this disparate information. This can be achieved using different approaches with differing complexity trade-offs.

¹⁶ <https://music-encoding.org/guidelines/v5/content/textencoding.html>

On the one hand, it would be possible to make use of <ptr> elements present in both encoded standards to make trans-document references. This would involve encoding syllable-level information within the TEI representation; the TEI <syll> element is only specified in the very narrow context of syllabification of headwords for dictionary entries (TEI, 2025: ch. 10.3.1),¹⁷ but it is possible to specify <seg> elements to represent segmentation of texts below the “chunk” level; these could be used to specify syllables, e.g., by setting a @type attribute of “syll”, as suggested for the structural division of verse texts (TEI, 2025: ch 6.1),¹⁸ though this is not a standardised usage. Each <seg> element would be identified by an XML identifier. The MEI encoding’s <syl> tags could then include a child <ptr> element pointing to the corresponding TEI <seg> to refer to the referenced syllable. The <ptr> element may take an @xlink:show attribute to specify the anticipated action a renderer should take when encountering it; the role of “embed” specifies that the referenced resource should be embedded within the local document at the point of the link.

Alternatively, a higher-granularity structure such as <w> (a grammatical word) or <l> (a line of verse) could be identified in the TEI. Each MEI <syl> could refer to its higher-granularity environment within the textual encoding using the @corresp attribute, used to point to other elements corresponding to this one in a generic fashion.

The advantage of the first approach is that the textual content needs only to be stored once, within the TEI file; the pointer mechanism would then be used to carry it into the MEI environment when required. This kind of inclusion of fragments of external data within a local context by reference, i. e., avoiding duplication, is termed *transclusion* (Kolbitsch, & Maurer, 2006). It enables the encoded data to be represented using a single source of truth (i. e., the textual values within the TEI file), minimizing the scope for duplication errors and subsequent ambiguities. However, it increases the technological complexity of the system; relies on non-standardised TEI structural elements; and places greater cognitive effort on the shoulders of the music encoders, who must faithfully transcribe each XML identifier out of context of the textual value it represents.

The shortcomings of this option incline us to favour the second approach instead: textual content is duplicated, once in syllabised form within the MEI encoding and again at higher granularity within the TEI. The use of @corresp to reference one from the other allows the incorporation of the data into synoptic interfaces that show aspects of both encodings, though at different resolutions. This makes it possible to design interaction methods such as selecting a note with underlaid syllabised text and automatically highlighting the corresponding line of verse within a textual view. Importantly, it also enables computational analyses of one modality to automatically identify the corresponding information in the other.

¹⁷. <https://tei-c.org/release/doc/tei-p5-doc/de/html/DI.html#DITPFO>

¹⁸. <https://tei-c.org/release/doc/tei-p5-doc/en/html/VE.html>

4. PRELIMINARY CONCLUSIONS

The *E-Laute* project began in March 2023, with the literary studies subproject starting approximately one year later. Over the past ten months the collaboration already has proved to be enlightening and instructive. Initially, there was a mutual exchange on the specific nature of our sources, accompanied by a growing familiarity with the process of digital editing in TEI-XML. We assumed at the outset that this exchange would be necessary given that songs are a dual musical and linguistic medium. Indeed, working with songs in lute tablatures, has already contributed to a more precise and distinctive understanding of songs and their cultural context. Moreover, our project paves the way for an exhaustive catalogue of the late medieval and early modern German song. The current project's three-year span represents the first of three intended modules spanning nine years of research, with the current temporal scope of 1450-1550 expanded to provide comprehensive coverage of all surviving sources of German lute tablature (1450-1600) by the end of the anticipated long-term project timeline.

The first steps have shown that new questions and challenges arise in the interdisciplinary interactions between research in the humanities and the digital and technological aspects of the project. By facilitating access to the sources and providing descriptive information, a digital edition and an open knowledge platform can foster mutual understanding between the various disciplines. Collaboration between computer and data science and the humanities on the one hand, and across the humanities on the other, could thus become more standard practice.

CONTRIBUTION OF THE AUTHORS

- The names of the authors appear in alphabetical order.
- Concept, structure, development of the underlying ideas: SR, DW.
- Encoding schemas/xml solutions: SR, DW.
- Chapter 1, 2 and 4: SR, DW.
- Chapter 3.1-3.3: SR.
- Chapter 3.4: DW.

REFERENCES

- Böker-Heil, N., Heckmann, H., & Kindermann, I. (1979-1986). *Das Tenorlied. Mehrstimmige Lieder in deutschen Quellen 1450-1580* (3 vols.). Bärenreiter.
- Brown, H. M. (1965). *Instrumental Music Printed before 1600: A Bibliography*. Harvard University Press. <https://doi.org/10.4159/harvard.9780674731677>
- Classen, A. (2001). *Deutsche Liederbücher des 15. und 16. Jahrhunderts*. Waxmann Verlag.
- Dart, T., Morehen, J., & Rastall, R. (2001). Tablature. In *Grove Music Online*. Oxford University Press., <https://doi.org/10.1093/gmo/9781561592630.article.27338>
- Der arme Heinrich – digital. <https://doi.org/10.11588/edition.ahd>
- Dröse, A. (2023). Das Lied in der Frühen Neuzeit. Skizze eines interdisziplinären Forschungsfeldes. *Artes. Zeitschrift für Literatur und Künste der vormodernen Welt*, 2(2), 177-211. <https://doi.org/10.30965/27727629-20230008>
- E-Laute. *Electronic Linked Annotated Unified Tablature Edition. The Lute in the German-Speaking Area 1450-1550*. <https://e-laute.info/>
- Fritze, C. (2019). Wohin mit der digitalen Edition? Ein Beitrag aus der Perspektive der Österreichischen Nationalbibliothek. *Bibliothek – Forschung und Praxis*, 43(3), 432-440. <https://doi.org/10.1515/bfp-2019-2068>
- Füssel, S., & Kreutzer, H. J. (Eds.). (1988). *Historia von D. Johann Fausten. Text des Drucks von 1587. Kritische Ausgabe*. Philipp Reclam.
- Goy, F.-P., Meyer, C., & Rollin, M. (Eds.). (1991-1999). *Sources manuscrites en tablature: Luth et theorie (c. 1500-c. 1800): Catalogue descriptif* (Vols. 1-3). Valentin Koerner.
- Grosch, N. (2010). Tabulaturdrucke: Der Versuch interaktionsfreier musikalischer Kommunikation im 16. Jahrhundert. In B. Lodes (Ed.), *NiveauNischeNimbus. 500 Jahre Musikdruck nördlich der Alpen* (pp. 135-146). Hans Schneider. <https://doi.org/10.2307/j.ctvg8p2x9.9>
- Hess, P. (2007). Poetry in Germany, 1400-1700. In M. Reinhart (Ed.), *Early Modern German Literature 1350-1700* (pp. 395-465). Camden House.
- Holznagel, F.-J. (2013). Weltliche Liederbücher des 15. und 16. Jahrhunderts. Zur Beschreibung eines literarisch-musikalischen Diskurses im deutschsprachigen Spätmittelalter. In O. Krämer & M. Schröder (Eds.), *‘Hebt man den Blick, so sieht man keine Grenzen’. Grenzüberschreitung als Paradigma in Kunst und Wissenschaft. Festschrift für Hartmut Möller zum 60. Geburtstag* (pp. 74-87). Die Blaue Eule.
- Holznagel, F.-J. (2016). Wil gi horen enen sanck? Zum Konzept einer Medienkulturgeschichte der Lyrik in den handschriftlichen, weltlichen Liederbüchern des 15. und 16. Jahrhunderts. In D. Klein (Ed.), *Überlieferungsgeschichte transdisziplinär. Neue Perspektiven auf ein germanistisches Forschungsparadigma* (pp. 307-336). Reichert Verlag.
- Hübner, G. (2002). Christoph von Schallenberg und die deutsche Liebeslyrik am Ende des 16. Jahrhunderts. *Daphnis. Zeitschrift für Mittlere Deutsche Literatur und Kultur der Frühen Neuzeit*, 31(1-2), 127-186.
- Hübner, G. (2005). Die Rhetorik der Liebesklage im 15. Jahrhundert. Überlegungen zu Liebeskonzeption und poetischer Technik im Minnesang und im ‘mittleren System’. In G. Hübner (Ed.), *Deutsche Liebeslyrik im 15. und 16. Jahrhundert. 18. Mediävistisches Kolloquium des Zentrums für Mittelalterstudien der Otto-Friedrich-Universität Bamberg* (pp. 83-117). Rodopi.

- Hübner, G. (2006). Die deutschen Villanellen Jakob Regnarts. In C. Pfau & K. Slámová (Eds.), *Deutsche Literatur und Sprache im Donauraum* (pp. 237–260). Univerzita Palackého v Olomouci.
- Hübner, G. (2008). Dieweil solcher abwechslung das Menschlich gemüt sehr bedürfftig. Leonhard Lechners Liebeslieder. In A. Groos, H.-J. Schiewer & M. Stock (Eds.), *Topographies of the Early Modern German City* (pp. 161–192). V&R unipress. <https://doi.org/10.14220/9783862345359.161>
- Hübner, G. (2011a). Vorgetragene Liebesdialoge. Die Poetik des Dialoglieds im Minnesang und im Korpus Mönch von Salzburg. In M. Münkler (Ed.), *Aspekte einer Sprache der Liebe. Formen des Dialogischen im Minnesang* (pp. 35–58). Peter Lang.
- Hübner, G. (2011b). Stilregister deutschsprachiger Liebeslieder um 1500. ‚Gesellschaftslied‘ und ‚Volkslied‘ im Tenorlied-Œuvre Ludwig Senfls. In K. Boll & K. Wenig (Eds.), *Kunst und saelde. Festschrift Trude Ehlert* (pp. 39–57). Königshausen & Neumann.
- Hübner, G. (2013). Schlechte Dichtung? Senfls Liebeslied-Texte und die deutsche Liebeslyrik des 15. und 16. Jahrhunderts. In S. Gasch & S. Tröster (Eds.), *Senfl-Studien 2* (pp. 99–120). Hans Schneider. <https://doi.org/10.2307/j.ctvg8p2jo.8>
- Hübner, G. (2016). Klang als Form in reimreichen Liedern. Adams von Fulda Ach hülf mich leid und der mittelalterliche musiktheoretische Dichtungsbegriff. In A. Symanczyk (Ed.), *Klang – Kontakte. Kommunikation, Konstruktion und Kultur von Klängen* (pp. 57–72). Reimer Verlag.
- Keil, K., & Pugin, L. (2018). Das Internationale Quellenlexikon der Musik, RISM: Ein Gemeinschaftsprojekt zum Nutzen und als Aufgabe für Forschung und Bibliotheken. *Bibliothek – Forschung und Praxis*, 42(2), 309–318. <https://doi.org/10.1515/bfp-2018-0042>
- Kirnbauer, M. (2012). Lieder ohne Worte. Hans Judenkünigs Lautentabulaturen von 1523. In A. Classen, M. Fischer, & N. Grosch (Eds.), *Kultur- und kommunikationshistorischer Wandel des Liedes im 16. Jahrhundert* (pp. 155–168). Waxmann.
- Kolbitsch, J., & Maurer, H. (2006). Transclusions in an html-based environment. *CIT. Journal of Computing and Information Technology*, 14(2), 161–173. <https://doi.org/10.2498/cit.2006.02.07>
- Kropik, C., & Rosmer, S. (2024). Das deutschsprachige Liebeslied im fünfzehnten und sechzehnten Jahrhundert – Begriff, Geschichte, Forschung, Einleitung und Problemaufriss. In C. Kropik & S. Rosmer (Eds.), *Geselliger Sang. Poetik und Praxis des deutschen Liebesliedes im 15. und 16. Jahrhundert* (pp. 1–38). De Gruyter. <https://www.degruyter.com/document/doi/10.1515/978311347134-001/html> <https://doi.org/10.1515/978311347134-001>
- Lewon, M. (2013). The earliest source for the lute. The Wolfenbüttel lute tablature. *Journal of the Lute Society of America*, 46, 1–70.
- Lewon, M. (2016). A (re-)construction of the Wolfenbüttel lute tablature-fragments. *Lute Society of America Quarterly*, 51(1), 12–25.
- MEI. (2025, January 22). The Music Encoding Initiative Guidelines. Version 5.1 (#9d551da). <https://music-encoding.org/guidelines/v5/content/index.html>
- Schöning, K., de Valk, R., Weigl, D. M., Kyriazis, I., Janjuš, O., Burghoff, H., & Steindl, C. (2025). A Collaborative Digital Edition of 15th- and 16th-century German lute tablature: The E-LAUTE project. *Journal of New Music Research*. Advance online publication. <https://doi.org/10.1080/09298215.2024.2445593>

- SMuFL. Standard Music Font Layout. <https://www.smufl.org/>. <https://smufl-browser.edirom.de/index>
- TEI. (2025). Text Encoding Initiative. TEI: Guidelines for Electronic Text Encoding and Interchange. P5 Version 4.9.0. Last updated on 24th January 2025, revision f73186978. <https://www.tei-c.org/release/doc/tei-p5-doc/en/html/index.html>
- VDLied – Das Verzeichnis der deutschsprachigen Liedflugsdrucke. <https://kxp.kioplus.de/DB=1.60/>; www.vd-lied.de
- Wegera, K.-P., Solms, H.-J., Demske, U., & Dipper, S. (2021). Referenzkorpus Frühneuhochdeutsch (1350-1650), Version 1.0. <https://www.linguistics.ruhr-uni-bochum.de/ref/>
- Wenzelsbibel Digital. Die Wenzelsbibel – Digitale Edition und Analyse. Ein Kooperationsprojekt des Fachbereichs Germanistik der Universität Salzburg und der Österreichischen Nationalbibliothek. Version 5.0.1. (2024, October 4). <https://edition.onb.ac.at/wenzelsbibel>
- Young, C., & Kirnbauer, M. (Eds.). (2003). *Frühe Lautentabulaturen im Faksimile / Early Lute Tablatures in Facsimile*. Amadeus Verlag.

Sources

- Gerle, H. (1532). *Musica Teusch auf die Instrument der grossen vnnnd kleinen Geygen auch Lautten [...] vormals im Truck nye vnd ytzo durch Hans Gerle Lutinst zu Nurenberg außgangen*. Nürnberg: Hieronymus Formschneider. <http://resolver.staatsbibliothek-berlin.de/SBB0001441A00000000>
- Judenkünig, H. (1523). *Ain schone kunstliche vnderweisung in disem büechlein leychtlich zu begreyffen den rechten grund zu lernen auff der Lautten vnd Geygen mit vleiß gemacht durch Hans Judenkünig [...]*. Wien: Johann Singriener d. Ä. <http://data.onb.ac.at/rec/AC09185338>
- Wo soll ich mich hinkehren. *Ein freyes Lyed von einem freyen Schlemmer mit vier stymen: Wo soll ich mich hyn kören, ich thumes brüderlein*. [Nuremberg: Wolfgang Huber c. 1505–1510], copy: München, Bayerische Staatsbibliothek, Mus. Pr. 156/16. http://daten.digitale-sammlungen.de/bsb00090652/image_1



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