



# Review of the Busoni Digital Edition

*Ferruccio Busoni – Briefe und Schriften*, Ullrich Scheidler and Christian Schaper (ed.), 2016-2018.  
<https://www.busoni-nachlass.org> (Last Accessed: 06.02.2020). Reviewed by Theodor Costea  
(Independent scholar), theo.costea@gmail.com.



## Abstract

*Ferruccio Busoni – Briefe und Schriften* is a digital scholarly edition of letters and other writings from the literary estate of the Italian composer Ferruccio Busoni (1866-1924). It aims to transcribe and richly encode these documents as well as publish them along with a critical apparatus and digital facsimiles. The project is currently work in progress – at the moment of this review – and successfully functions as a community project with contributions from university students. Despite minor shortcomings which are perfectly normal for a project in this stage, the Busoni edition leaves an excellent overall impression and stands out in regard to data quality and standards compliance.

## Introduction

1 In late 2015, as part of a seminar at the Institute of Musicology, students of the Humboldt University in Berlin started working on a digital edition of documents from Ferruccio Busoni's literary estate, kept by the Berlin State Library. It is by no means a coincidence that the Busoni edition came about in Berlin. The Italian composer and pianist owned an apartment in Schöneberg and lived there intermittently during the second half of his life.

# The project and its goals

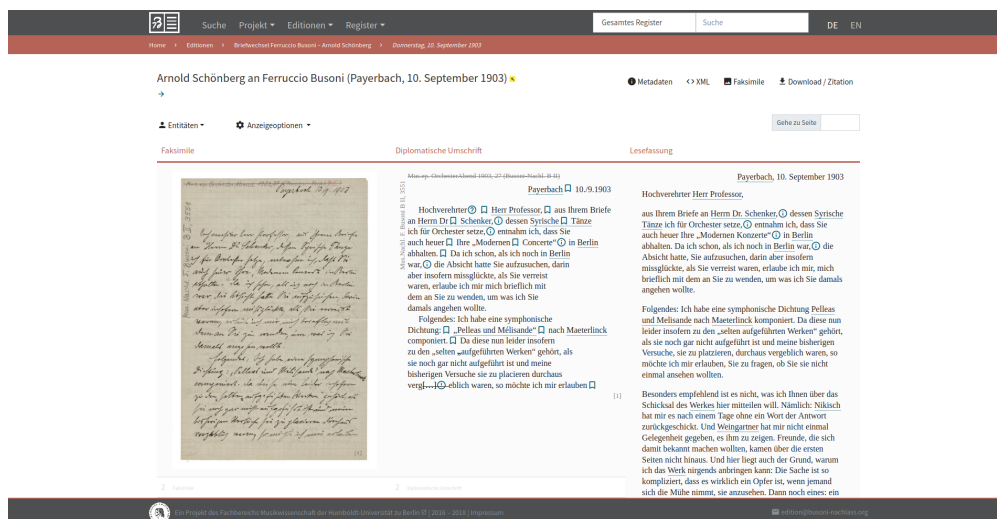


Fig. 1: The three default document view options, side by side.

2 The digital edition, coordinated by Christian Schaper and Ullrich Scheideler, was developed, as already mentioned, with substantial help from students of the Humboldt University. At the time of this review it's unclear from the project description if the edition is still an active work in progress or is in stagnation after expiry of the funding period. Funding was provided since 2015 by the Academic Senate of the Humboldt University. The project aims to publish Busoni's letter exchange with seven correspondents (insofar as preserved and available), and several documents pertaining to his essay *Entwurf einer neuen Ästhetik der Tonkunst* (1916). The presentation layer of the transcribed and encoded documents aims to provide three view options (facsimile, diplomatic and reading version, see [fig. 1](#)), complemented by an extensive critical apparatus.

3 It's worth mentioning that the Busoni digital edition refers to two other well known projects as sources of inspiration, both conceptually and technically: *Briefe und Texte aus dem intellektuellen Berlin um 1800*<sup>1</sup> and the *Carl Maria von Weber-Gesamtausgabe*<sup>2</sup> (WeGA). This particularly applies for the edition guidelines and the technical implementation of the Busoni web app. It's refreshing and inspiring to see a digital scholarly edition emerging as a collaborative academic community project carried out (technically and content-wise) by students and very transparently taking influence from mature, established projects of similar nature.<sup>3</sup> The reuse by the Busoni edition testifies to the quality of the WeGA-App and its documentation and sets a laudable precedent for future projects. It shows that projects with limited resources can profit from the outcomes of projects which can afford investing in elaborate software solutions, provided the latter

follow established standards and best practices<sup>4</sup> for research software documentation and publishing.

## Technology and data model

4 The current web app was released in September 2018 and supersedes an older, technologically and functionally more modest version. The old app relied on generating static HTML via XSLT stylesheets. The new one is a dynamic eXist-db app forked, as previously mentioned, from the WeGA-App developed by Peter Stadler. The project most certainly profited substantially from this transition, considering the inherent limitations of a static website. It is, however, unfortunate that the old version has not been retained either online as an archived and referenceable publication or simply in the form of a publicly available Git repository.

5 While the project generally does an excellent job of documenting itself, it remains unclear from the project description and edition guidelines how the data input is carried out. A rough description of the workflow and tools used to input and mark up the data would be a helpful addition to the project documentation.

6 The data model of the Busoni edition is TEI P5 compliant and thoroughly documented in the edition guidelines.<sup>5</sup> Each document and entity of the edition is referenceable by using a system of internal, semantic identifiers which leverage a set of prefixes documented in the guidelines. Authority file URIs are provided for named entities, and correspondence metadata is encoded in close accordance with the TEI correspondence description standard.<sup>6</sup> The fact that the edition does not provide an API for publishing its correspondence metadata in CMI format<sup>7</sup> is a significant drawback. However, the Busoni edition manages to implement established standards for digital scholarly editions of letters in an almost exemplary manner. The metadata also includes a detailed revision history, documenting the authorship, date and content of each processing step.

7 The text is transcribed diplomatically and is complemented by normalized orthography and punctuation. Normalized text phenomena are used for generating the reading view in the web app. The manuscript layout is encoded in detail, including line breaks, alignment and rotation. Indices are provided for a fairly standard set of entities: places, people, institutions, and writings. Letters, the dominant type of edited documents,

include a summary. The Busoni edition takes on the task of implementing an overall ambitious data model and so far has succeeded in doing so.

## User interface

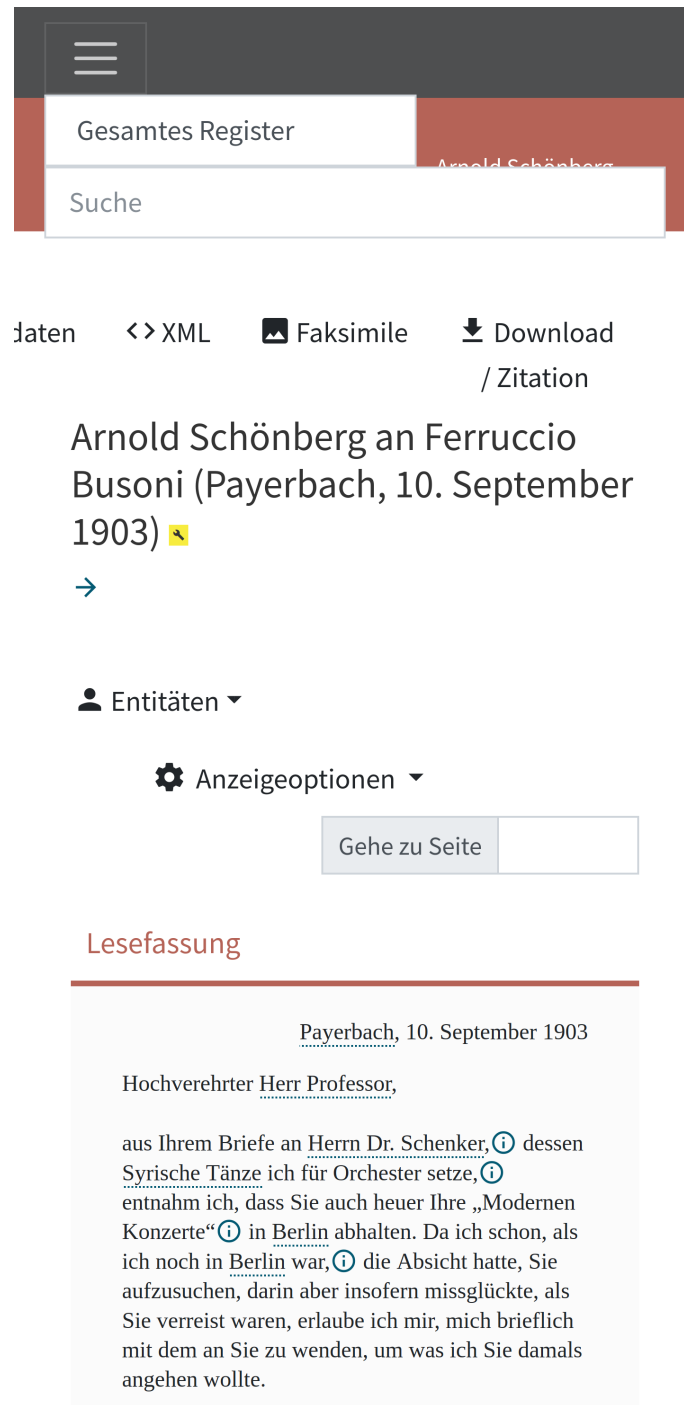


Fig. 2: An example document view for a letter in a narrow viewport.

8 At first glance, the design of the presentation layer manages to make a fairly conservative impression without necessarily appearing outdated. Navigation is easy and intuitive on a device with a large viewport. On smaller viewports, the layout of the web

app starts exhibiting minor bugs, showing that it is not thoroughly optimized for such screen sizes, despite being responsive thanks to Bootstrap (see [fig. 2](#)). This however shouldn't be seen as a setback, considering the target audience of such a publication will most probably use a large screen when consulting the web app for research purposes. The interface of the Busoni edition has been bilingual (German and English) since the last release of the app in 2018. While the intention of publishing a bilingual interface is definitely worth praising, English translations for important pages (e.g. project description and edition guidelines, referenced above) are missing from the web app at the time of this review.

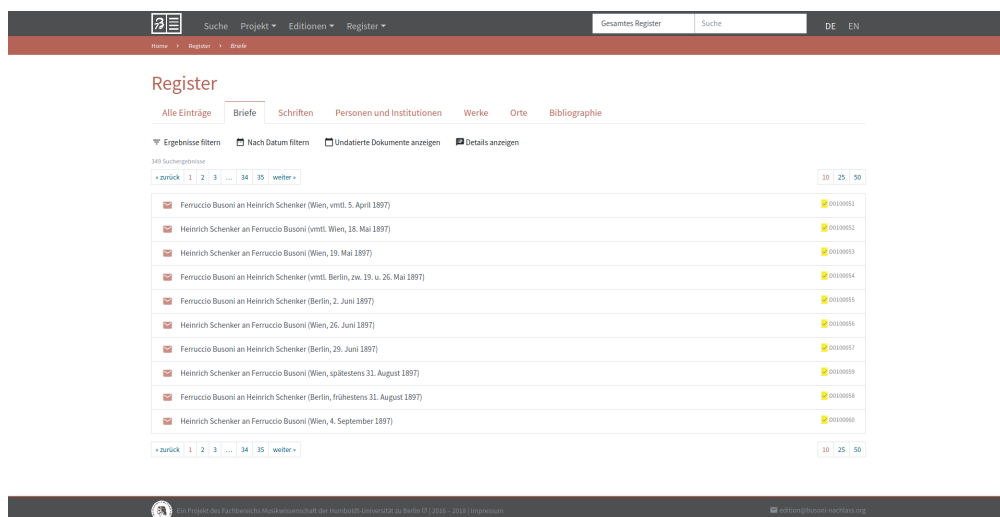


Fig. 3: The overview page showing an index of all letters covered by the edition.

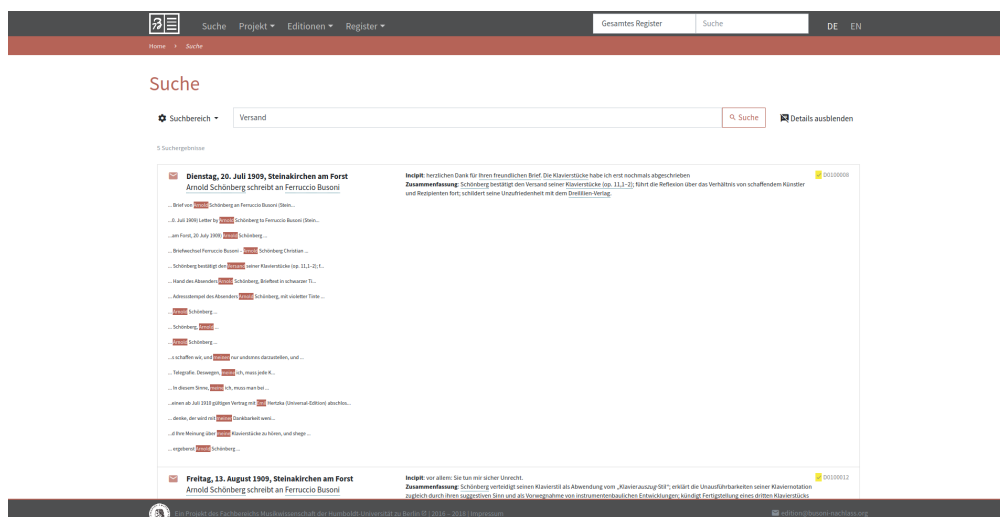


Fig. 4: The search results page with details (including KWIC) toggled on.

9 As in most editions the edited documents can be accessed either via an index page with a filterable list (see [fig. 3](#)) or via fulltext search (see [fig. 4](#)). By using the

navigation bar on top, one can also navigate directly to an overview of a certain letter exchange with one of the six correspondents. Either way, the list indicates the processing status of each document with an icon and a tooltip, a very welcome feature for work in progress. The list on the overview page includes several filters for the usual metadata used in such cases (author, addressee, place of origin etc.). Among them the date filter stands out, being implemented as a large slider which spans horizontally along almost the whole width of the viewport, reminding vaguely of a similar widget used for the same purpose in the *Alfred Escher-Briefedition*<sup>8</sup>. The search queries performed by setting filters on the overview page are referenceable by URL thanks to the usage of query parameters.

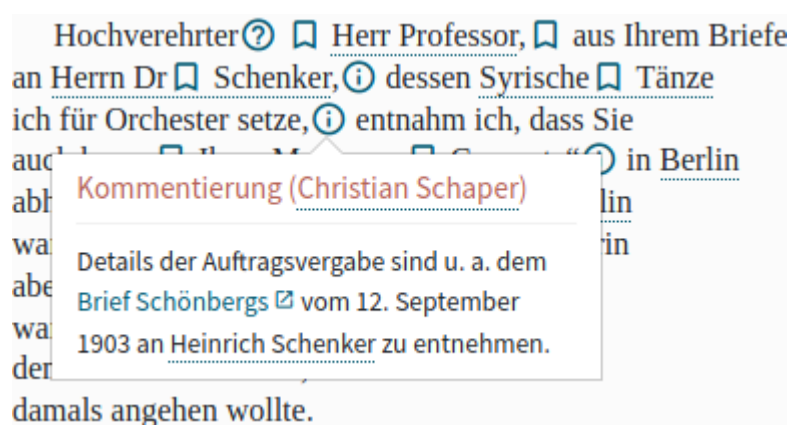


Fig. 5: Commentary popover example from letter D0100001.

10 The detailed view for each letter by default offers a vertically tiled three-part view with a facsimile, diplomatic transcription and reading version. Textual commentary and details for each named entity marked up in the text can be accessed through popover dialogs (see [fig. 5](#)) signaled by small icons in the transcribed text and by dotted underlining, respectively. An XML view of the letter body can optionally be interposed as a fourth column. This arrangement, even in the default three-column version, appears quite dense, an impression highlighted by the typesetting choices for the diplomatic and reading views. The very small font size (< 1 em) makes the reading experience far from effortless. This leaves the impression of a costly compromise made to retain the ability of fitting at least three display versions simultaneously on the same page.

11 While the typographic choices might not be optimal, yet, the overall layout and structure of the document view is well thought through and easy to use. Any combination

of display versions can be configured using a set of toggles in a dropdown menu. Document metadata and a list of mentioned entities are hidden in easily accessible dialogs. The facsimile view uses the OpenSeadragon viewer<sup>9</sup> to display high quality, high resolution images, most of which are provided by the Berlin State Library. As an explicitly experimental feature, the Busoni edition offers a fairly rough PDF export for each edited document, based on the reading version of the transcribed text.

12 The fulltext search feature can be used on edited documents and/or indices. Keywords in context for the search results can be toggled on optionally. A search query with the KWIC supplement activated is perceptibly sluggish and confusingly mixes in certain keywords which the user did not input for a specific search query. While a basic functionality is already available, the fulltext search most certainly leaves room for improvement regarding performance and precision.

13 From a user perspective, the separation of the fulltext search functionality from the overview page with metadata filters seems very impractical. Being able to use these features simultaneously to query for documents would enable the user to leverage the specific advantages of a digital edition much better. For instance one could carry out a fulltext search and subsequently reduce the search results by specifying an addressee or a timespan. If this separation is not due to any substantial technical obstacles, it might be worth considering merging the functionalities of these two pages in a future version, if the project resources allocated to web development allow it, of course.

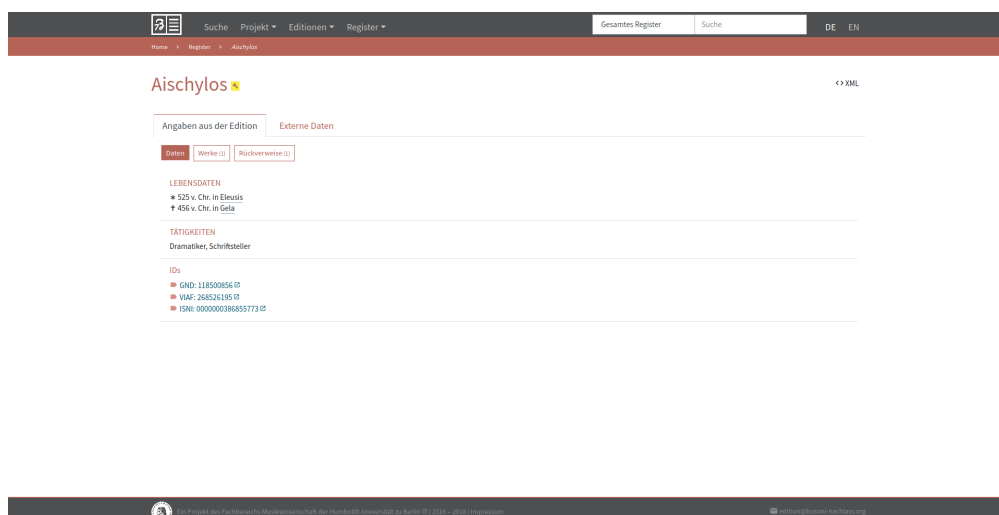


Fig. 6: The person detail page for ancient Greek tragedian Aeschylus.

14 The detail pages dedicated to index entities (places, people etc.) contain rich metadata and links to documents in which the respective entity was mentioned (see [fig.](#)

6). Places include geographic coordinates and URLs for two authority files (*Gemeinsame Normdatei* and *GeoNames*). The place index of the Busoni edition does not include a map widget and justifiably so, considering that a map widget mostly fulfills the role of an aesthetically pleasing gimmick more than a functionally relevant tool in the context of presenting a single geographic entity. There are however external links to *Google Maps* and *Open Street Maps* for the purpose of seeing the position of the geographic coordinates on a map. The detail pages for persons and institutions have also been enriched with several authority file URLs and customary biographical metadata. These pages are also complemented by an additional tab with external data embedded from sources like *Wikipedia* or the *Gemeinsame Normdatei (GND)*, where applicable.

## Research data

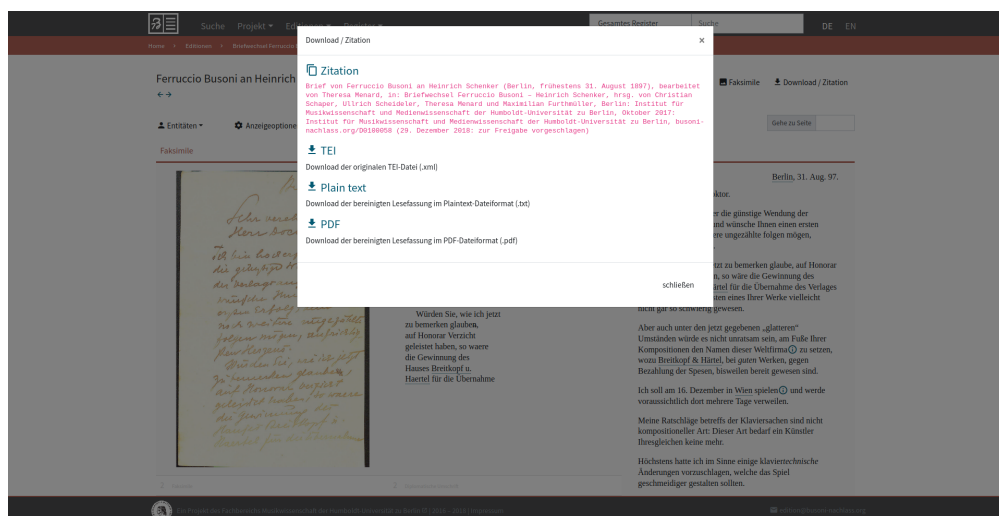


Fig. 7: Citation suggestion model for letter D0100058.

15 Every page of the Busoni web app offers a full citation suggestion for itself and is available in TEI XML format (see [fig. 7](#)). Interestingly, this applies not only for the edited documents, but for every single page of the app, meaning that even pages such as the imprint or the project description include a citation snippet for themselves and can be exported as TEI XML documents. The edited documents also include the processing status and the corresponding date in the citation suggestion, making up for the lack of data versioning in the web app. This entire feature ensures the excellent citability and scholarly usability of the Busoni edition.

16 Another aspect which makes up for the lack of a data versioning in the web app is the fact that the entire corpus of TEI XML encoded documents are made publicly



available as a repository on the university GitLab.<sup>10</sup> The repository directly reflects the current status of the research data as work in progress and offers full transparency regarding each processing step. A further GitLab repository containing the fork of the WeGa-App<sup>11</sup> is also publicly available at the time of this review but not linked in any way from the project description or any other page of the website.

17 The research data quality of the Busoni edition is satisfyingly high. In addition to the aforementioned aspects, the edition dataset offers extensive metadata, has an open license (CC BY-NC-SA 4.0), is interoperable, thoroughly documented and highly accessible for manual use via downloading individual documents or the Git repository containing the data. It's a downside that the edition lacks machine readability and should facilitate it by offering the data as a public web service (a feature already implemented in the related *Weber-Gesamtausgabe*).

## Conclusion

18 The Busoni edition is a remarkable digital publication, considering the context in which it emerged and the fact that it is partly realised by students as part of learning the craft of digital scholarly editing. For an undertaking of this nature, the project aims for very high standards and manages to fulfill most of them so far and leave a fairly good impression ahead of its completion. The data model and its implementation are rich and tidy, and the interface has plenty of useful functionalities despite still being rough around the edges. The project is well documented through its edition guidelines and is well citable. Sadly, the project description currently seems to suggest a stagnation of the efforts to finalize the editorial work.

19 The work done by the students, student employees and coordinators of the project is definitely praiseworthy despite its imperfections and can be seen as exemplary for future projects aiming to build a digital scholarly edition by embedding its workflow in an academic curriculum. There are, however, several aspects of the edition (e.g. suboptimal text layout, faulty fulltext search, no web APIs etc.) that still need to be addressed in order to meet the requirements of a modern digital scholarly edition.

## Notes

1. Briefe und Texte aus dem intellektuellen Berlin um 1800. <https://web.archive.org/web/20200201101652/https://www.berliner-intellektuelle.eu/> (German).

2. Carl-Maria-von-Weber-Gesamtausgabe. Digitale Edition. <https://web.archive.org/web/20190421060849/https://www.weber-gesamtausgabe.de/de/Index> (German).
3. Ferruccio Busoni – Briefe und Schriften. Projektbeschreibung. <https://web.archive.org/web/202002011103054/https://busoni-nachlass.org/de/Projekt/Projektbeschreibung> (German).
4. Wilson, Greg, Jennifer Bryan, Karen Cranston, Justin Kitzes, Lex Nederbragt and Tracy K. Teal. 2017. Good enough practices in scientific computing. PLoS Comput Biol 13(6). <https://doi.org/10.1371/journal.pcbi.1005510>.
5. Ferruccio Busoni – Briefe und Schriften. Editionsrichtlinien. <https://web.archive.org/web/20200201111118/https://busoni-nachlass.org/de/Projekt/Editionsrichtlinien> (German).
6. TEI P5: Guidelines for Electronic Text Encoding and Interchange, Section 2.4.6. Correspondence Description, version 3.6.0, <https://tei-c.org/release/doc/tei-p5-doc/en/html/HD.html#HD44CD>.
7. Dumont, Stefan, Ingo Börner, Dominik Leipold, Jonas Müller-Laackman, Gerlinde Schneider. 2019. Correspondence Metadata Interchange Format, in: Encoding Correspondence. A Manual for Encoding Letters and Postcards in TEI-XML and DTABf, ed. by Stefan Dumont, Susanne Haaf and Sabine Seifert. <https://encoding-correspondence.bbaw.de/v1/CMIF.html>.
8. Digitale Briefedition Alfred Escher. Briefe. <https://web.archive.org/web/20200201114126/https://www.briefedition.alfred-escher.ch/briefe/> (German).
9. <https://web.archive.org/web/20200201114734/https://openseadragon.github.io/>.
10. Please note that the GitLab link in the project description page points to a publicly inaccessible repository at the time of this review. A publicly accessible repository containing the edition data seems to be located at <https://scm.cms.hu-berlin.de/busoni-schriften/busoni-data-public>.
11. <https://scm.cms.hu-berlin.de/busoni-schriften/WeGA-WebApp-lib>.

# Factsheet

Resource reviewed	
<b>Title</b>	Ferruccio Busoni – Briefe und Schriften
<b>Editors</b>	Ullrich Scheidler and Christian Schaper
<b>URI</b>	<a href="https://www.busoni-nachlass.org">https://www.busoni-nachlass.org</a>
<b>Publication Date</b>	2016-2018
<b>Date of last access</b>	06.02.2020

Reviewer	
<b>Surname</b>	Costea
<b>First Name</b>	Theodor
<b>Organization</b>	Independent scholar
<b>Place</b>	Berlin
<b>Email</b>	theo.costea (at) gmail.com

Documentation		
<b>Bibliographic description</b>	Is it easily possible to describe the project bibliographically along the schema "responsible editors, publishing/hosting institution, year(s) of publishing"? (cf. <a href="#">Catalogue 1.2</a> )	yes
<b>Contributors</b>	Are the contributors (editors, institutions, associates) of the project fully documented? (cf. <a href="#">Catalogue 1.4</a> )	yes
<b>Contacts</b>	Does the project list contact persons? (cf. <a href="#">Catalogue 1.5</a> )	yes
Selection of materials		
<b>Explanation</b>	Is the selection of materials of the project explicitly documented? (cf. <a href="#">Catalogue 2.1</a> )	yes
<b>Reasonability</b>	Is the selection by and large reasonable? (cf. <a href="#">Catalogue 2.1</a> )	yes

<b>Archiving of the data</b>	Does the documentation include information about the long term sustainability of the basic data (archiving of the data)? (cf. <a href="#">Catalogue 4.16</a> )	no
<b>Aims</b>	Are the aims and purposes of the project explicitly documented? (cf. <a href="#">Catalogue 3.1</a> )	yes
<b>Methods</b>	Are the methods employed in the project explicitly documented? (cf. <a href="#">Catalogue 3.1</a> )	yes
<b>Data Model</b>	Does the project document which data model (e.g. TEI) has been used and for what reason? (cf. <a href="#">Catalogue 3.7</a> )	yes
<b>Help</b>	Does the project offer help texts concerning the use of the project? (cf. <a href="#">Catalogue 4.15</a> )	no
<b>Citation</b>	Does the project supply citation guidelines (i.e. how to cite the project or a part of it)? (cf. <a href="#">Catalogue 4.8</a> )	yes
<b>Completion</b>	Does the edition regard itself as a completed project (i.e. not promise further modifications and additions)? (cf. <a href="#">Catalogue 4.16</a> )	no
<b>Institutional Curation</b>	Does the project provide information about institutional support for the curation and sustainability of the project? (cf. <a href="#">Catalogue 4.13</a> )	no
<b>Contents</b>		
<b>Previous Edition</b>	Has the material been previously edited (in print or digitally)? (cf. <a href="#">Catalogue 2.2</a> )	no
<b>Materials Used</b>	Does the edition make use of these previous editions? (cf. <a href="#">Catalogue 2.2</a> )	not applicable
<b>Introduction</b>	Does the project offer an introduction to the subject-matter (the author(s), the work, its history, the theme, etc.) of the project? (cf. <a href="#">Catalogue 4.15</a> )	no
<b>Bibliography</b>	Does the project offer a bibliography? (cf. <a href="#">Catalogue 2.3</a> )	yes

<b>Commentary</b>	Does the project offer a scholarly commentary (e.g. notes on unclear passages, interpretation, etc.)? (cf. <a href="#">Catalogue 2.3</a> )	yes
<b>Contexts</b>	Does the project include or link to external resources with contextual material? (cf. <a href="#">Catalogue 2.3</a> )	no
<b>Images</b>	Does the project offer images of digitised sources? (cf. <a href="#">Catalogue 2.3</a> )	yes
<b>Image quality</b>	Does the project offer images of an acceptable quality? (cf. <a href="#">Catalogue 4.6</a> )	yes
<b>Transcriptions</b>	Is the text fully transcribed? (cf. <a href="#">Catalogue 2.3</a> )	yes
<b>Text quality</b>	Does the project offer texts of an acceptable quality (typos, errors, etc.)? (cf. <a href="#">Catalogue 4.6</a> )	yes
<b>Indices</b>	Does the project feature compilations indices, registers or visualisations that offer alternative ways to access the material? (cf. <a href="#">Catalogue 4.5</a> )	yes
<b>Documents</b>		
<b>Types of documents</b>	Which kinds of documents are at the basis of the project? (cf. <a href="#">Catalogue 1.3</a> and <a href="#">2.1</a> )	Single work, Letters
<b>Document era</b>	What era(s) do the documents belong to? (cf. <a href="#">Catalogue 1.3</a> and <a href="#">2.1</a> )	Modern
<b>Subject</b>	Which perspective(s) do the editors take towards the edited material? How can the edition be classified in general terms? (cf. <a href="#">Catalogue 1.3</a> )	Musicology
<b>Presentation</b>		
<b>Spin-offs</b>	Does the project offer any spin-offs? (cf. <a href="#">Catalogue 4.11</a> )	none
<b>Browse by</b>	By which categories does the project offer to browse the contents? (cf. <a href="#">Catalogue 4.3</a> )	Authors, Works, Persons, Places
<b>Search</b>		
<b>Simple</b>	Does the project offer a simple search? (cf. <a href="#">Catalogue 4.4</a> )	yes

<b>Advanced</b>	Does the project offer an advanced search? ( <a href="#">cf. Catalogue 4.4</a> )	no
<b>Wildcard</b>	Does the search support the use of wildcards? ( <a href="#">cf. Catalogue 4.4</a> )	not applicable
<b>Index</b>	Does the search offer an index of the searched field? ( <a href="#">cf. Catalogue 4.4</a> )	no
<b>Suggest functionalities</b>	Does the search offer autocompletion or suggest functionalities? ( <a href="#">cf. Catalogue 4.4</a> )	no
<b>Helptext</b>	Does the project offer help texts for the search? ( <a href="#">cf. Catalogue 4.4</a> )	no
<b>Aim</b>		
<b>Audience</b>	Who is the intended audience of the project? ( <a href="#">cf. Catalogue 3.3</a> )	Scholars
<b>Typology</b>	Which type fits best for the reviewed project? ( <a href="#">cf. Catalogue 3.3</a> and <a href="#">5.1</a> )	Enriched Edition
<b>Method</b>		
<b>Critical editing</b>	In how far is the text critically edited? ( <a href="#">cf. Catalogue 3.6</a> )	Normalization, Emendation, Commentary notes
<b>Standards</b>	( <a href="#">cf. Catalogue 3.7</a> )	
<b>XML</b>	Is the data encoded in XML?	yes
<b>Standardized data model</b>	Is the project employing a standardized data model (e.g. TEI)?	yes
<b>Types of text</b>	Which kinds or forms of text are presented? ( <a href="#">cf. Catalogue 3.5.</a> )	Facsimiles, Diplomatic transcription, Edited text, Commentaries
<b>Technical Accessibility</b>		
<b>Persistent Identification and Addressing</b>	Are there persistent identifiers and an addressing system for the edition and/or parts/objects of it and which mechanism is used to that end? ( <a href="#">cf. Catalogue 4.8</a> )	Persistent URLs
<b>Interfaces</b>	Are there technical interfaces like OAI-PMH, REST etc., which allow the reuse of the data of the project in other contexts? ( <a href="#">cf. Catalogue 4.9</a> )	none

<b>Open Access</b>	Is the edition Open Access?	yes
<b>Accessibility of the basic data</b>	Is the basic data (e.g. the XML) of the project accessible for each part of the edition (e.g. for a page)? (cf. <a href="#">Catalogue 4.12</a> )	yes
<b>Download</b>	Can the entire raw data of the project be downloaded (as a whole)? (cf. <a href="#">Catalogue 4.9</a> )	yes
<b>Reuse</b>	Can you use the data with other tools useful for this kind of content? (cf. <a href="#">Catalogue 4.9</a> )	yes
<b>Rights</b>		
<b>Declared</b>	Are the rights to (re)use the content declared? (cf. <a href="#">Catalogue 4.13</a> )	yes
<b>License</b>	Under what license are the contents released? (cf. <a href="#">Catalogue 4.13</a> )	CC-BY-NC-SA
<b>Personnel</b>		
<b>Editors</b>	Ullrich Scheideler Christian Schaper	

<b>Contributors</b>	<p>           Jakob Schmidt            Peter Stadler            Anastasia Spiridonova            Claudio Arías Rodriguez            Lukas Baake            Patrick Becker            Thea Olivia Beger            Immanuel Beyreuther            Sophia Dörner            Marie Eggert            Marlene Everling            Hannah Fiedrowicz            Claudio Fuchs            Maximilian Furthmüller            Morten Grage            Clemens Gubsch            Edward Hamrock            Vanda Hehr            Marie-Luise Hildebrand            Anton Hoffmann            Tim Martin Hoffmann            Juliane Imme            Ulrike Japes            Vanessa Kimpel            Natalia Kononchuk            Clara Kroher            Erik Krummbach            Nicole Kufeld            Josefine Lindmar            Nicole Malige            Theresa Menard            David Mews            Kim Nocka            Filiz Oflazoğlu            Anna Prothmann            Ivana Rajic            Till Erik Sawallisch            Sebastian Schade            Angelina Smyschljajew            Wantana Tancharoenpol            Emilija Temirkulovaite            Judith Treumann            Friederike Walch            Jan Weber            Jupp Wegner            Elizaveta Willert         </p>
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