



Journal of the Text Encoding Initiative

2024

Selected Papers from the 2023 TEI Conference

Letters and Musical Sketches. Toward a Proper Integration of Bellini's Writings.

Laura Mazzagufo, Pietro Sichera, Daria Spampinato and Angelo Mario Del Grosso



Electronic version

URL: <https://journals.openedition.org/jtei/5300>

DOI: 10.4000/12na6

ISSN: 2162-5603

Publisher

TEI Consortium

Electronic reference

Laura Mazzagufo, Pietro Sichera, Daria Spampinato and Angelo Mario Del Grosso, "Letters and Musical Sketches. Toward a Proper Integration of Bellini's Writings.", *Journal of the Text Encoding Initiative* [Online], | 2024, Online since 30 October 2024, connection on 08 November 2024. URL: <http://journals.openedition.org/jtei/5300> ; DOI: <https://doi.org/10.4000/12na6>

The text only may be used under licence For this publication a Creative Commons Attribution 4.0 International license has been granted by the author(s) who retain full copyright.. All other elements (illustrations, imported files) are "All rights reserved", unless otherwise stated.

Letters and Musical Sketches. Toward a Proper Integration of Bellini's Writings.

Laura Mazzagufu, Pietro Sichera, Daria Spampinato, and Angelo Mario Del Grosso

ABSTRACT

This article examines the use of XML-based technologies to encode verbal and musical texts in two publishing products featuring autograph material by Vincenzo Bellini (1801–1835), held at the Museo civico Belliniano in Catania, Italy. The first product is a digital scholarly edition (DSE) of Bellini's autograph letters, encoded using the XML-TEI vocabulary. The second project involves the encoding of Bellini's musical sketches, which often complement the letters by providing concrete examples of his compositional techniques. An experimental approach using the Music Encoding Initiative (MEI) vocabulary was adopted for these sketches: this encoding process required custom solutions to address the texts' unique features, such as authorial interventions, the sketches' embryonic nature, the copresence of musical notation and textual annotations, and the interrelations of different studies.

This article therefore examines formal representational strategies and challenges encountered during the encoding process, particularly for musical texts, and presents an initial proposal aimed at properly integrating information from the TEI-encoded verbal texts and MEI-encoded musical texts, using an approach modeled after the Web Annotation Data Model (WADM) and its current implementation in TEI. We believe that the integration of these practices, technologies, and data is a means to unravel Bellini's compositional process and his artistic sensibility, thereby enhancing both scholarly research and public engagement with his work.

INDEX

Keywords: Digital scholarly edition, Vincenzo Bellini, musical sketches, XML-MEI, encoding integration, Bellini Digital Correspondence

1. Introduction

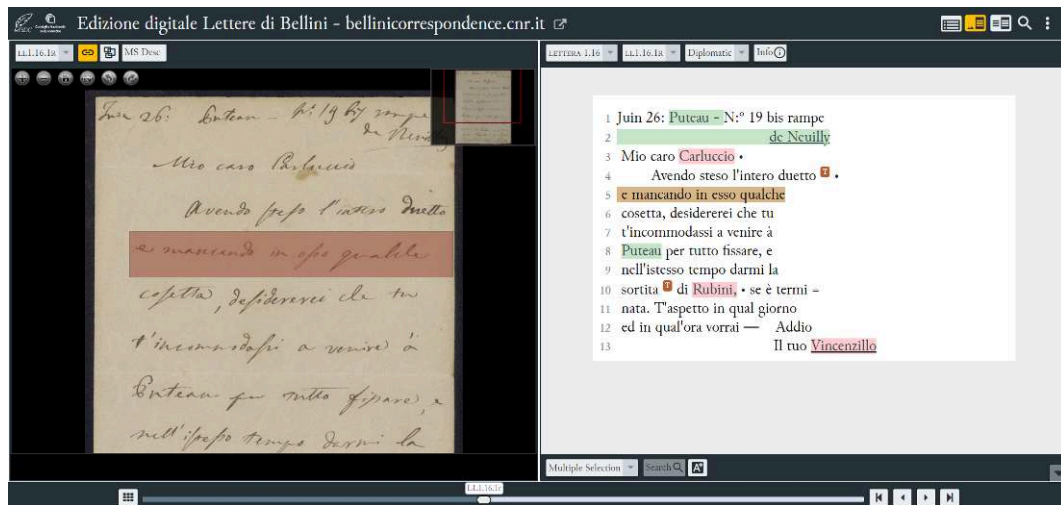
- 1 The article explores the use of XML-based technologies for encoding verbal and musical texts (with a particular focus on musical texts) in two distinct publishing products, both centered on autograph materials by Vincenzo Bellini (Catania, 1801–Puteaux, 1835), housed at the Museo civico Belliniano in Catania (Italy). The first product, named *Bellini Digital Correspondence* (BDC),¹ is a digital scholarly edition (DSE) focusing on the composer's autograph letters preserved at the Museum, encoded in accordance with the XML-TEI vocabulary (Mancinelli and Pierazzo 2020; Ciotti 2019). The BDC edition, initiated in 2017 and published in 2023 by CNR Edizioni, is the outcome of collaboration between the National Research Council of Italy (CNR), the Municipality of Catania, and the University of Pisa.
- 2 As a collaborative and distributed edition,² BDC originated as a multidisciplinary endeavor, applied to a selection of Bellini's correspondence, aiming to amalgamate existing resources and diverse tools—linguistic, musicological, and philological—into a new DSE (Del Grosso et al. 2019a). The edition is designed to serve both specialists and occasional museum visitors, with the latter able to access the edition via a touchscreen along the museum tour.

- 3 Several letters within the corpus contain numerous references to locations, individuals, and specific passages from Bellini's operas, thereby serving as vital sources of information regarding his compositional techniques, especially in relation to the late works composed for theaters in Milan (*La sonnambula* and *Norma*, both 1831), for La Fenice Theatre in Venice (*I Capuleti e i Montecchi*, 1830, and *Beatrice di Tenda*, 1833), and for the Théâtre de la comédie italienne in Paris (*I Puritani*, 1835). The process of formalizing the encoding criteria for BDC's epistolary corpus prompted a broader examination of other materials preserved at the museum, starting with the musical manuscripts.
- 4 In particular, some passages within the epistolary contain notes on compositional methodologies, which evidently correspond to specific musical sketches that present embryonic musical ideas and melodic motifs. Consequently, as a second further step, an experimental approach using an MEI encoding model was employed for this specific type of text: encompassing a manuscript text in its initial draft state, featuring the copresence of multiple codes (musical notation and textual annotations) and various notational particularities. This entailed the adoption of tailored encoding solutions according to the unique requirements of the text, alongside the proposal of an initial data visualization using the online tool Verovio MEI Viewer.³
- 5 Given the distinct nature of the manuscript text and the insightful references found within the epistolary correspondence, particular emphasis was placed on devising encoding solutions to delineate the relations between information belonging to the two different textual types, each encoded using a distinct vocabulary. This paper presents our initial proposal for such a solution, based on the Web Annotation Data Model (WADM), which we currently believe to be the most effective in meeting encoding requirements. The experimental solution discussed here represents only one of the possible approaches and is, as mentioned, a first step in a more comprehensive exploration of the topic. Each encoding strategy has been carefully considered in relation to the specific characteristics of the texts, as well as the available materials and resources (such as high-resolution photographic reproductions and the CLARIN repository). The general aim, however, has always been to formulate working hypotheses that are replicable and adaptable to other similar contexts and similar DSE projects.

2. Bellini Digital Correspondence

- 6 BDC is the digital scholarly edition of the forty autograph letters of Vincenzo Bellini (1801–1835) held at the Museo civico Belliniano in Catania, Italy. The project aims at providing a web platform for digital philology of Bellini's texts. BDC is a completely open-source and open-access project and is the result of a multidisciplinary initiative that implements a distributed, collaborative, and cooperative editing model (Del Grosso et al. 2019a, Del Grosso et al. 2019b, Cristofaro and Spampinato 2021, Robinson 2017).
- 7 The digital edition is image-based and has been developed following the TEI Guidelines. The web-based presentation of the edition has been achieved through EVT software (figure 1).⁴ Particular attention was paid to the management of metadata concerning the description of the correspondence, which were encoded through the `<tei:correspDesc>` element within the `<teiHeader>`.⁵ The TEI “Manuscript Description” module and the `<tei:facsimile>` element also provided an encoding mechanism for describing the primary source and linking the facsimile regions of interest with the corresponding text. The editorial process went through several phases, including one dedicated to the harmonization and standardization of TEI encoding (Cristofaro et al. 2023, Cristofaro et al. 2024), during which a number of tools—potentially reusable in similar encoding initiatives—were developed with the aim of ensuring the highest level of uniformity and consistency within the edition (Sichera et al. 2023). The edition provides both diplomatic and interpretive transcription levels based on the recent work by Seminara (Bellini 2017).

Figure 1. BDC digital edition, first recto leaf of letter LL1.16.



3. From Letters to Musical Sketches

- 8 Beyond providing a colorful and detailed insight into the daily life of the Catanian composer, the epistolary corpus offers various opportunities for historical and sociological investigation. The information gleaned from the epistolary, for example, sheds light on numerous aspects of Bellini's work, including instances of censorship interference, the composer's advocacy for fair and equitable remuneration for his work, and his recognition of the importance of copyright protection. Bellini frequently mentions the acclaim his performances received, particularly highlighting the success of the *Puritani*, exemplified vividly in the enthusiastic closing of letter LL1.19: "In another letter, I will elaborate further; for now, know that the *Puritani* are generating fanaticism night after night, and all of Paris is talking of nothing else" (Bellini 2017, 459–60).⁶ Bellini's autograph letters also reveal various aspects of the composer's musical preferences, particularly evident in his discussions with librettists and considerations regarding performers and their vocal attributes.
- 9 Although Bellini never felt compelled to articulate his poetics systematically in writing or as a manifesto, numerous details within the letters display a precise artistic sensibility entirely consistent with its realization in his musical compositions. Many linguistic, syntactic, and stylistic concerns highlighted both in the printed edition and through the encoding work in BDC suggest the composer's exact understanding of his expressive means, beyond the confines of musical

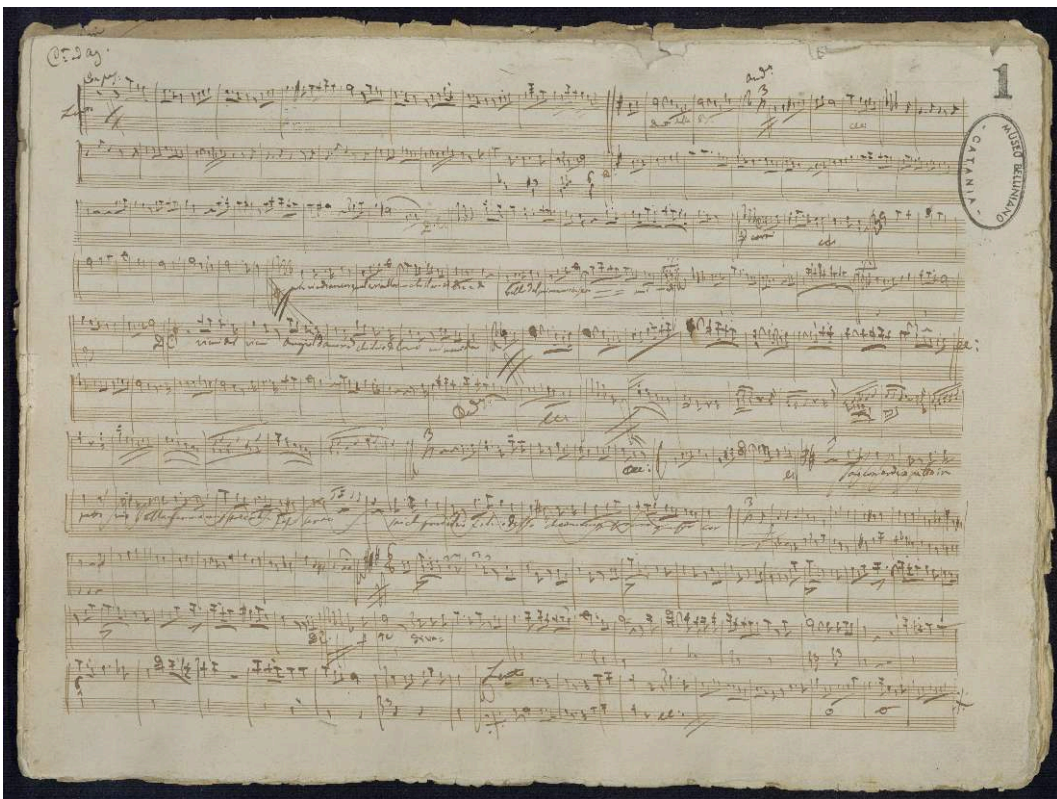
notation. It becomes apparent, for instance, from various passages within the epistolary that the process of composition was never an act of improvisation. The relation between lyrical text and its musical interpretation assumes a significant role in this context, with missives directed to Carlo Pepoli, the librettist of the *Puritani*, containing numerous insightful examples. This issue holds crucial importance for Bellini, who considered the libretto to be the “foundation of an opera” (Bellini 2017, 331–32 and BDC, LL1.14),⁷ and the “choice of the book [to be] nowadays . . . even more difficult than composing the music itself” (Bellini 2017, 328 and BDC, LL1.13.II).⁸ This theme frequently emerges prominently within the collection preserved at the museum in Catania, as well as throughout the epistolary correspondence.

- 10 In the work’s conception, the selection of subject matter and the effective dramatization of the text are deemed essential, and represent substantial investments in time and energy. It becomes apparent on multiple occasions, however, that the libretto did not consistently serve as the starting point of the creative process. For instance, in LL1.8, Bellini acknowledges that he has already begun working on the music for *Norma* before Felice Romani wrote the libretto: “My health is sound, and I am already applied to the new opera that is to be given at La Scala for 26 December next: the subject is *Norma*, a tragedy by Mr. Soumet; I find it interesting and if Romani will make a beautiful poem out of it, a fine libretto may be produced” (Bellini 2017, 242–43 and BDC, LL1.8).⁹
- 11 This methodology is not solely attributable to the composer’s predisposition or specific inclinations: while Bellini greatly esteemed Romani’s work, he consistently faced challenges in their collaboration. Romani, occupied with composing librettos for various musicians at the same time, often delivered poetic texts belatedly. Bellini’s practice of generating “motifs on a daily basis” (Bellini 2017, 139–40)¹⁰ allowed him to begin composing music before receiving the verses, thus optimizing the waiting time for the delivery of the text. Such passages support the argument that Bellini’s preliminary work, preceding the receipt of the libretto, involved the systematic creation and cataloging of “ready ideas” (Bellini 2017, 107–8)¹¹ for potential use, refined and presented to singers during rehearsals while awaiting definitive lyrics.
- 12 Additional evidence reveals Bellini’s habit of seeking appropriate dramaturgical contexts for each musical idea. For instance, Bellini wrote: “I have applied myself, and try to provide myself with *mottivi*, and I am not making bad ones, which I hope when I have the libretto to locate and develop effectively” (Bellini 2017, 145–47).¹²

4. Bellini's *Studi Giornalieri*

- 13 The preliminary phase of Bellini's work is documented in autograph sheets containing what he called "studi giornalieri" ("daily studies"). This practice accompanied Bellini practically from his conservatory studies until his death. In Catania, these studies are gathered in a group of papers: the initial ten, grouped under the signature MM.B.36, date from 1834–35 (Paris), while the last four date back to around 1824.

Figure 2. MM.B.36, first leaf. © Comune di Catania–Museo civico Belliniano.



- 14 As noted by Candida Mantica (2020), the sheets cataloged under MM.B.36 (figure 2) were discovered (alongside others of similar nature) in Bellini's Parisian residence, at Puteaux. Following the composer's demise they were inventoried and collected by Gioacchino Rossini, then dispatched to the Bellini family in Catania along with other personal belongings of the musician. Eventually they found their place in the Museo civico Belliniano, where they were cataloged and numbered from 1 to 20, "apparently without adhering to a specific order" (Mantica 2020, 31).¹³

- 15 Each page, in its oblong format, shares uniform dimensions (250 mm in height, 350 mm in length, according to catalog measurements) and comprises twenty-two (folios 1–5) or twenty-four (folios 6–10) staves.¹⁴ The collection, though generally well preserved, bears numerous stains, traces of mold, and some tears at the page edges. Each sheet encompasses several different studies, mostly annotated consecutively on a system of two staves, each separated from the next by a double bar line. Additional features, crucial from a genetic criticism perspective, effectively delineate the unique nature of the “studi giornalieri”: first the copresence of a writing that can be described as an embryonic stage of the musical material alongside very precise details (agogic indications, dynamics, detailed accompaniment passages, etc.), and second the presence of substitute and alternative variants which underscore the reconstruction of the creative process. Certain studies also bear an annotation beneath the first staff, presumably indicating the dramatic situation for the specific study.
- 16 Based on these observations, the “studi giornalieri” have been characterized as Bellini’s “musical archive” (Mantica 2020, 36), housing a variety of elements meticulously arranged for the composer to draw on as an opera’s structure and logic were conceived. Although the musical content of this witness (MM.B.36) is not directly related to a specific work, its significance lies in the notation of approximately 387 musical ideas of varied nature and extent, some of which would later figure in the composition of the *Puritani*.¹⁵ Figure 3 and figure 4 show one of them as an example.

Figure 3. Beginning of study [4, III]. © Comune di Catania—Museo civico Belliniano.

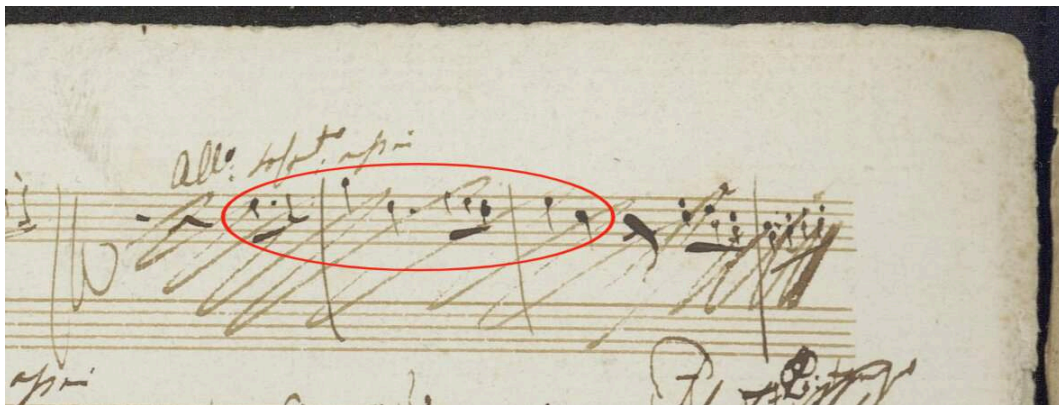


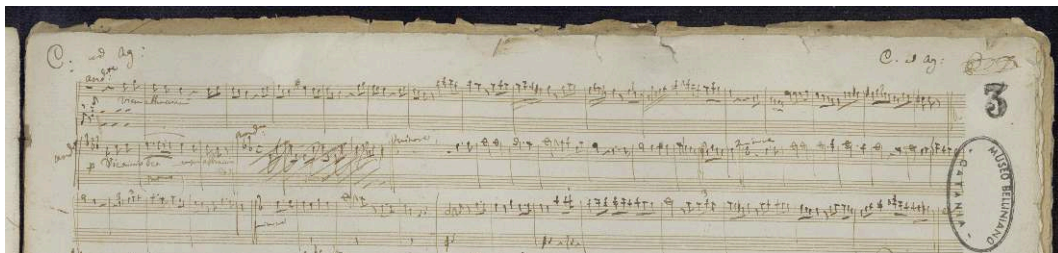
Figure 4. Corresponding segment of musical text that Bellini actually used in the score of the *Puritani*. The transcription is sourced from the critical edition of the *Puritani* (Bellini 2013).



- 17 Furthermore, it is notable how each study—even at this preliminary stage—has a distinct tonal connotation, although not always corresponding to the one that will be eventually selected for the published text. It is noteworthy that the majority of the sheets feature one or two initials in the margin, typically located in the upper left corner, but occasionally also appearing in the upper right corner. These initials serve as Bellini’s summary of the nature or intended use of the studies on the sheet. They encompass a range of descriptors, from “C[anta]to ed ag[ito]” on folios I, IIr, and IIv to “Cc [= Cori] e mar[ce] e mot[ivi] per ripieno” on folios VIIr and VIIv, and from the common “L[arghi]” to “Cc” (i.e., “Cori”) and “Aa” (i.e., “Arie”) (figure 5).¹⁶ Hence the studies present a heterogeneous array of forms and contents, including not only melodies tailored to specific vocal parts but also instrumental passages and accompaniments. Furthermore, as highlighted by Mantica, “it appears evident that Bellini affixed these signs after the page was already completed, thus serving cataloging purposes rather than programmatic intentions, enabling him to navigate more easily through his own annotations” (Mantica 2020, 36).

Figure 5. Detail of Bellini’s abbreviations. Reproduction of the upper margin of folio IIIr of the MM.B.36 folder.

© Comune di Catania—Museo civico Belliniano.



5. MEI Encoding

- 18 Materials such as the “studi giornalieri” thus offer an additional avenue for elucidating certain passages of Bellini’s correspondence or attempting to contextualize, if not outright validate, certain theories and declarations of intent found within Bellini’s letters to his closest correspondents. To facilitate this endeavor, a digital representation was created through XML encoding—adhering to the MEI Guidelines (version 5.0)¹⁷—of specific segments of the musical text extracted from the aforementioned MM.B.36 file housed at the Museo civico Belliniano, which currently serves as the primary source for the “studi giornalieri.” For the identification of such segments—particularly noteworthy from melodic, genetic, or historical perspectives—and their transcription and genetic analysis, reference was made to the aforementioned work conducted by Mantica (2020).
- 19 In devising an encoding model, it is crucial to delineate the objectives and purposes of encoding, opting to emphasize only those elements that address specific research inquiries. Consequently, the focus of our activity centered primarily on the examination of musical material and its transcription, as well as the selection of elements from the MEI vocabulary deemed most suitable for representing this textual type.
- 20 One of the most intriguing aspects for the encoding objectives lies in the diverse nature of the content compiled within the “studi giornalieri,” as evidenced by the composer’s internal categorization noted in the margins of the pages, employing abbreviations to denote the content of the studies contained on each page (figure 5). This categorization indeed constitutes paratextual data, that is, information not directly related to the body of the text, that can be understood as a type of metadata compiled by the author himself. In light of this, one potential encoding solution was to include these abbreviations within the <mei:front> section of each transcribed text. The abbreviations were expanded in accordance with Mantica’s recommendation (see, in example 1, the attribute @resp and its value “#CBM”), using a tag selection closely resembling the one expressed with TEI elements in BDC.

Example 1. Excerpt of the MEI encoding of the <front> section in study [3, I].¹⁸

```
<front xmlns="http://www.music-encoding.org/ns/mei" meiversion="5.0.0">
  <div type="sigle_belliniane"><!-- Bellini's abbreviations-->
    <p n="1" xml:id="sigla1">
```

```

<choice>
  <abbr source="#Mantica2020" type="contraction">C: ed ag.</abbr>
  <expan source="#Mantica2020" resp="#CBM">Cantato ed agito</expan>
</choice>
</p>
<p n="2" xml:id="sigla2">
  <choice>
    <abbr source="#Mantica2020" type="contraction">C. ed ag.</abbr>
    <expan source="#Mantica2020" resp="#CBM">Cantato ed agito</expan>
  </choice>
</p>
<p n="3" xml:id="sigla3">
  <del rend="strikethrough">
    <choice>
      <abbr source="#Mantica2020" type="contraction">P T</abbr>
      <expan source="#Mantica2020" resp="#CBM" cert="low">Pezzi Teatrali</expan>
    </choice>
  </del>
</p>
</div>
<div type="paratesto">
  <stamp type="catalogue">
    <locus n="3">3</locus>
    <corpName ref="#museo_belliniano">Museo Civico Belliniano</corpName>
  </stamp>
</div>
</front>

```

- 21 Given the unique layout of the “studi giornalieri” on the manuscript page and their continuous, uninterrupted arrangement, we deemed it important to encode the splitting of staves systems within the page. This was accomplished by using the <sb> (system beginning) element to denote the point where the staff breaks off and continues on a new line.
- 22 Following the MEI Guidelines, generic parameters are specified within <scoreDef> (example 2): this element includes indications for key signatures and time metrics, typically encoded through attributes such as @keysig @meter.count , @meter.unit, and @meter.sym. Furthermore, the <staffDef> element describes individual staves, detailing the type of clef used (usually indicated

by attributes such as `@clef line` and `@clef shape`). Given that these elements, particularly clef and meter indications, are often implicit in Bellini's autographs, the encoding incorporates optional attributes of `<staffDef>` and `<scoreDef>` to signify certain characteristics of the manuscript text, highlighting its nature as a preliminary sketch. In particular, we have used the `@clef visible` attribute of `<staffDef>` and the `@meter.visible` attribute of `<scoreDef>`, with boolean values to determine whether the clef and time signature are to be displayed.¹⁹ At the same time, `<mei:supplied>` contains indications provided by the transcriber (in this case key and meter indications).

Example 2. Definition of score parameters in study [3, I].

```
<scoreDef xml:id="m-28" meter.count="4" meter.unit="4" meter.visible="false">
  <staffGrp xml:id="m-29">
    <staffGrp xml:id="m-40" n="1" symbol="brace">
      <staffDef xml:id="m-30" clef.line="2" clef.shape="G" clef.visible="false"
key.mode="major" key.sig="2f" lines="5" n="1">
        <label xml:id="m-31">Motivo annotato</label>
        <instrDef xml:id="m-34" midi.channel="1" midi.pan="53" midi.volume="100"/>
      </staffDef>
      <staffDef xml:id="m-35" clef.line="4" clef.shape="F" key.mode="major"
key.sig="2f" lines="5" n="2">
        <label xml:id="m-36">Accompagnamento o struttura armonica</label>
      </staffDef>
    </staffGrp>
  </staffGrp>
</scoreDef>
<section n="1" xml:id="m-41">
  <relation type="editorial" rel="preceding" plist="#studio3-1"
target="#studio3-7 #studio3-8 #studio3-9 #edizione-critica"/>
  <pb xml:id="m-43"/>
  <measure xml:id="m-42" n="1">
    <staff xml:id="m-44" n="1">
      <supplied resp="#CBM">
        <clef line="2" shape="G"/>
        <meterSig count="4" unit="4"/>
      </supplied>
      <layer xml:id="m-45" n="1">
```

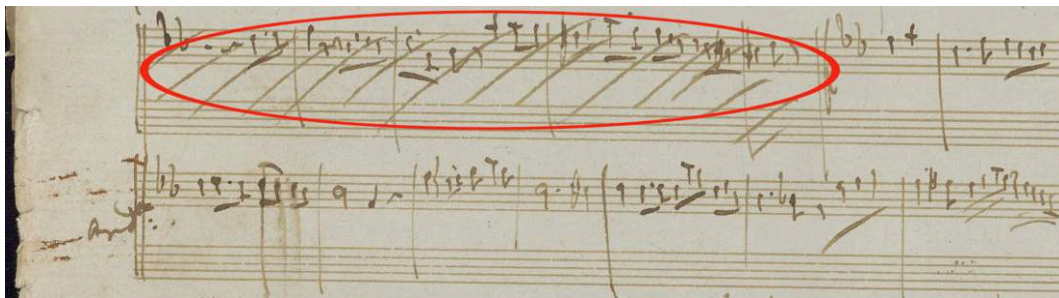
```

. . .
</layer>
</staff>
</measure>
. . .
</section>

```

- 23 In study [4, III], we were able to explore several straightforward editorial interventions by Bellini and consider their possible representation in MEI encoding. When encoding the musical text, we consulted the Editorial Markup section (11) of the guidelines. Specifically, we used the `<mei:del>` and `<mei:add>` elements, drawn from the TEI vocabulary and potentially accompanied by the `@resp` and `@cert` attributes, to denote the presence of a deletion and an added replacement, respectively (figure 6 and example 3). These elements were employed in conjunction with the `<mei:subst>` element to represent the substituted variant. Certain specific textual annotations penned by Bellini above or in the margin of the staff, as observed in the case of study [4, III], were encoded using the `<dir>` (directive) element, supplemented by an `@startid` attribute linking it to a score event, as stipulated by the semantics of control events in MEI.

Figure 6. Detail of a textual deletion by Bellini (study [3, IX]). Reproduction of the central part of the left margin in folio IIIr of the MM.B.36 folder. © Comune di Catania—Museo civico Belliniano.



Example 3. Encoding of textual deletion in study [3, IX].

```

<del resp="#VB" type="strikethrough" hand="#VB_brownInk1">
  <section n="4" xml:id="m-635">
    . . .
    <measure xml:id="m-637" label="32" n="33">
      . . .
    </measure>

```

. . .
 </section>

24

25 As is often the case (Viglianti 2016), words appear in musical texts in various forms—be it as annotations, lyrical text intended for singing, or the like—and the same holds true for Bellini’s musical sketches: a limited number of the “studi giornalieri” whose material was subsequently reworked in the *Puritani* feature accompanying text. Specifically, whereas eleven studies contain words integrated into the vocal line below the first staff, only two ([1, XVIII] and [3, II]) directly contributed material to the opera’s score. Generally, it is plausible to infer that the words accompanying the incipits of the studies—for example “Vieni abbracciami” in study [3, I]—merely serve as prosodic references employed by Bellini to delineate a dramaturgical circumstance, rather than exact references to passages in the *Puritani* libretto. Consequently, it was deemed appropriate to encode this segment of the text using the <dir> element, as illustrated in the previous paragraph. A notable exception arises with study [3, VII], which pertains to the same thematic *family* as study [3, I]. While it remains unclear when the words “Se non viene io qui mi moro” were integrated into the music, it is plausible to speculate that during the interval while awaiting Pepoli’s verses, Bellini conceptualized the dramatic context, allocating specific studies to the duet between Elvira and Arturo in the opera’s third act. Notably, the formulation of the sketch of the tempo di mezzo in the same duet may well have begun with study [3, I]. Although these words may not represent the final verses incorporated into Pepoli’s libretto, because their function is akin to what the lyrical text would have offered, it makes sense to encode the quoted words using the <syl> element.

26 As mentioned in connection with studies [3, I] and [3, VII], there are familial connections among various groups of studies. The scenario represented by the material archived in the Museo civico Belliniano’s folder MM.B.36 is notably intricate, as multiple editorial phases are discernible even at this preliminary drafting stage, each evidenced by a distinct study (and in at least one instance by editorial manipulations and interventions within the same study). Notably, on folios III and IV, at least five studies exhibit identifiable connections by sharing specific melodic motifs, figurations, or rhythmic patterns.

- 27 MEI offers a tagset designed to delineate various genetic states within the <music> element, specifically through <genDesc> and individual genetic states described within <genState> elements. For instance, when considering the group of “studi giornalieri” that served as Bellini’s source for the composition of the initial motif sung by Arturo in the tempo d’attacco of the duet with Elvira, in the third act of the *Puritani* (no. 9, “Nel mirarti un solo istante”), the description of genetic stages could be structured as outlined in [example 4](#).

Example 4. Encoding of genetic states for related “studi giornalieri,” using the <genDesc> tagset.

```

<!-- GENETIC STAGES DESCRIPTION -->
<genDesc ordered="true">
  <!-- 'Studi Giornalieri': study 3, I -->
  <genState xml:id="s_1a" label="Studi Giornalieri: 3, I" precedes="#s_1b">
    <desc>
      Studio in Si bemolle maggiore, in tempo 4/4. Caratterizzato dall'apertura su
un intervallo ascendente di seconda maggiore, in levare.
    </desc>
  </genState>
  <!-- 'Studi Giornalieri': study 3, VII -->
  <genState xml:id="s_1b" label="Studi Giornalieri: 3, VII" precedes="#s_1c"
follows="#s_1a">
    <desc>
      Studio in Re maggiore, in tempo 4/4. Caratterizzato dall'apertura su un
intervallo discendente di seconda maggiore, su un ritmo puntato. Lo studio è
corredato di un testo verbale.
    </desc>
  </genState>
  <!-- 'Studi Giornalieri': study 3, VIII -->
  <genState xml:id="s_1c" label="Studi Giornalieri: 3, VIII" precedes="#s_1d"
follows="#s_1b">
    <desc>
      Studio in Si bemolle maggiore, tempo 4/4. Caratterizzato da un intervallo
ascendente di seconda minore, in levare, su ritmo puntato, a cui segue un
intervallo di seconda maggiore. Presenta una configurazione formale più precisa
(una semifrase di quattro battute sospesa sulla dominante, seguita da una
semifrase di quattro battute, conclusa sulla tonica).
    </desc>
  </genState>

```



```

<!-- 'Studi Giornalieri': study 3, IX -->
<genState xml:id="s_1d" label="Studi Giornalieri: 3, VII" precedes="#s_1e"
follows="#s_1c">
  <desc>
    Studio in Si bemolle maggiore, tempo 4/4. Caratterizzato dalla stessa
    figurazione iniziale di 3, VIII, con semifrasi accorciate a due battute. Lo studio
    è stato cassato interamente.
  </desc>
</genState>
<!-- 'Studi Giornalieri': study 4, III -->
<genState xml:id="s_1e" label="Studi Giornalieri: 4, III" precedes="#s_2"
follows="#s_1d">
  <desc>
    Studio in Do maggiore, in tempo 4/4. Lo studio è un abbozzo di sezione di 22
    battute che rielabora il profilo melodico di 3, IX. Presenta cancellature e una
    variante alternativa.
  </desc>
</genState>
</genDesc>

```

- 28 An alternative approach worth considering involves establishing a more generic link in the representation of the text within `<music>` (for example, by means of the `@corresp` attribute), while concurrently providing a more precise description through metadata, such as the milestone `<mei:relation>` element. This element describes a relation or link between two entities and aligns with the semantics of the corresponding `<tei:relation>` TEI element. The `<mei:relation>` element uses attributes like `@plist` and `@target` to reference the corresponding `<mei:item>` element within `<manifestationList>`, which, within the `<meiHead>` of the corpus, represents and delineates each of the studies. Additionally, `@rel` describes the type of relation (e.g., "preceding", "isSuccessorOf") between the entities identified by the `@plist` and `@target` attributes.

6. Links between the Epistolary and External Resources

- 29 Within the composer's correspondence, allusions to such preparatory studies are articulated interchangeably using the terms *idea* (predominantly in the plural) or *mottivo* (Bellini 2017, 145–47). The proposition that Bellini's compositional process before he received the libretto's text

involved systematically jotting down and cataloging “ready ideas,” which could later undergo refinement as they were presented to singers during rehearsals while awaiting a final text, finds support in a passage concerning the creation of the *Puritani*. In this passage, Bellini writes to Florimo, his comrade from his formative years in Naples and subsequently his exceptional friend and confidant, that “composing two [of the] pieces is a matter of orchestrating them and putting them together well, because I have the main motifs prepared and I am waiting for Pepoli to finish for me a duet that I have high hopes for.”²⁰ (Bellini 2017, 401–3).

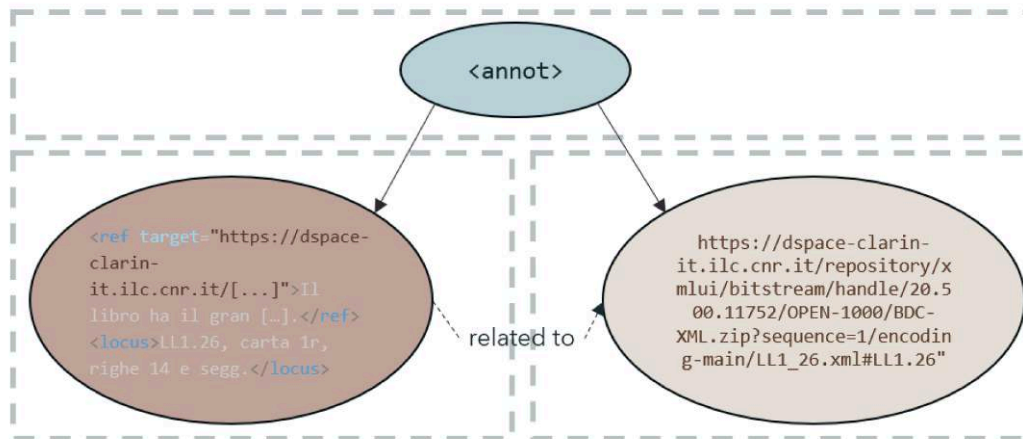
- 30 A primary focus of the encoding endeavor entails establishing connections between the information delineated in the composer’s correspondence, including references to works, dates, and occasionally specific passages of Bellini’s music such as precise arias or duets, and other details discerned within the scores and musical sketches. Further, as previously noted in the context of Bellini’s correspondence with Francesco Florimo or Vincenzo Ferlito, mentions of particular compositional processes frequently surface in the drafts of manuscript scores. In the “studi giornalieri,” selected passages within the museum’s epistolary corpus may yield noteworthy insights into autograph musical material, the compositional process, or interactions with librettists. For example, in letter LL1.26, Bellini addresses Vincenzo Ferlito regarding the libretto of the *Puritani*, critiquing its shortcomings: “It has the great defect that it is not well dialogued: the situations are beautiful, the expressions repeated, common, stupid sometimes, in a word it is seen that he who wrote it had neither heart nor knowledge to express well the feelings of his characters” (Bellini 2017, 505–6, and BDC, LL1.26).²¹
- 31 The interrelation between segments of text encoded in XML-TEI and those represented using the XML-MEI encoding language inevitably raises the still unresolved and much-debated issue of a potential and desired integration between the TEI and MEI vocabularies. For matters directly related to the characteristics of the encoded text, recourse to the WADM has been feasible,²² leveraging the example provided by the TEI vocabulary, which permits linking to a URI as a target, and supplemented by explanatory metadata about the annotation (figure 7).
- 32 To illustrate a potential method of linking the BDC epistolary and music encoding, the aforementioned epistolary passage can be cited as a critical note in the music text within <annot>, an MEI vocabulary element which, while being derived from the TEI <tei:note> tag, also shares some features with the more recent <tei:annotation> tag (see the extract from the MEI encoding

in [example 5](#)). The reference to the external resource uses the `<mei:ref>` child element's `@target` attribute, which contains the URI of the BDC edition repository established in CLARIN.²³ The `@startid` and `@endid` attributes facilitate contextualizing the annotation to a precise location within the encoding of the studies (in the example provided in [example 4](#), these points correspond to the unique identifier values of the first and last syllables of the text under study [3, VII]). Additionally, in this instance it was feasible to use the `<mei:locus>` element to specify the letter referred to.

Example 5. Excerpt from the MEI encoding, with reference to five lines from letter [LL1.26](#).

```
<annot xml:id="link-BDC_1" startid="#m-347" endid="#m-393">
  <ref target="https://dspace-clarin-it.ilc.cnr.it/repository/xmlui/bitstream/handle/20.500.11752/OPEN-1000/BDC-XML.zip?sequence=1/encoding-main/LL1_26.xml#LL1.26">Il libro ha il gran difetto che non è bene dialogato: le situazioni sono belle, l'espressioni ripetute, comuni, stupide qualche volta, in una parola si vede che chi l'ha scritto non avea ne cuore, ne cognizioni per bene esprimere i sentimenti dei suoi personaggi.</ref>
  <locus>LL1.26, carta 1r, righe 14 e segg.</locus>
</annot>
```

Figure 7. Web Annotation Data Model exemplified on the case of listing 4.



7. Conclusions

- 33 This paper described an ongoing initiative to develop an encoding model for integrating data representation in both verbal and musical texts. This initiative represents one of the attempts currently under study, and is not a definitive result but rather a starting point for a deeper exploration of the subject. We highlighted several challenges, especially in harmonizing specific textual phenomena encoded following the TEI Guidelines with that relevant to musical editions, and vice versa.
- 34 Despite many long-standing discussions, this effort remains a complex and challenging issue within the scholarly community. In our research, the text edition and the digital representation of these musical texts provided a compelling case study for delving into Bellini's creative process, as revealed through his correspondence. The next step will combine the recently published edition of the letters (BDC 2023) with a web-based prototype. This prototype will allow users to explore a selection of fragments from the musical resources we are encoding. By integrating different artifacts preserved by the museum, this web-based prototype will offer scholars the opportunity to formulate working hypotheses about Bellini's way of writing.
- 35 Our proposed method aims at a more comprehensive integration of text and music within the edition. This will lead to a scholarly visualization tool that includes musical content linked to the corresponding textual content.

BIBLIOGRAPHY

- Bellini Digital Correspondence* (BDC). 2023. Edited by Angelo Mario Del Grosso and Daria Spampinato. Roma: CNR Edizioni. <http://bellinicorrespondence.cnr.it/>.
- Bellini, Vincenzo. 2013. *I Puritani*. Edited by Fabrizio Della Seta. Milan: Ricordi.
- . 2017. *Carteggi*. Edited by Graziella Seminara. Florence: Olschki.
- Ciotti, Fabio. 2019. "A Realistic Theory of Textuality and its Consequences on Digital Text Representation." *What Is Text, Really? TEI and Beyond. TEI Conference Book of Abstracts 2019*. <https://gams.uni-graz.at/o:tei2019.100>.

- Cristofaro, Salvatore, and Daria Spampinato. 2021. "OntoBelliniLetters: A Formal Ontology for a Corpus of Letters of Vincenzo Bellini." In *Metadata and Semantic Research*, edited by Emmanouel Garoufallou and María-Antonia Ovalle-Perandones. Cham, Switzerland: Springer International Publishing: 192–203.
- Cristofaro, Salvatore, Angelo Mario Del Grosso, Laura Mazzagufu, Pietro Sichera, and Daria Spampinato. "Bellini Digital Correspondence: A Model for Making Collaborative Digital Scholarly Editions." *2023 7th IEEE Congress on Information Science and Technology (CiSt), 18–22 December 2023, Agadir-Essaouira, Morocco*: 615–20. <https://doi.org/10.1109/CiSt56084.2023.10409920>.
- . 2024. "Implementing Collaborative Digital Scholarly Editions: Insights from *Bellini Digital Correspondence*." *International Journal of Information Science and Technology (IJIST)*, in press.
- Del Grosso, Angelo Mario, Erica Capizzi, Salvatore Cristofaro, Graziella Seminara, and Daria Spampinato. 2019. "Promoting Bellini's Legacy and the Italian Opera by Scholarly Digital Editing His Own Correspondence." Poster paper presented at the TEI Conference and Members' Meeting 2019. *What Is Text, Really? TEI and Beyond*. 16–20 September 2019, Graz, Austria. TEI Conference Book of Abstracts 2019. <https://doi.org/10.5281/zenodo.3461673>.
- Del Grosso, Angelo Mario, Erica Capizzi, Salvatore Cristofaro, Maria Rosa De Luca, Emiliano Giovannetti, Simone Marchi, Graziella Seminara, and Daria Spampinato. 2019. "Bellini's Correspondence: A Digital Scholarly Edition for a Multimedia Museum." *Umanistica Digitale* 7: 23–47 (<http://doi.org/10.6092/issn.2532-8816/9162>).
- Mancinelli, Tiziana, and Elena Pierazzo. 2020. *Che cos'è un'edizione scientifica digitale*. Rome: Carocci Editore.
- Mantica, Candida Billie. 2020. "Gli 'studi giornalieri' di Bellini «sviluppati con effetto» nei Puritani." *Bollettino di Studi Belliniani* 6: 29–73. <https://doi.org/10.17422/ISSN.2283-8716/1043>.
- Robinson, Peter. 2017. "Some Principles for Making Collaborative Scholarly Editions in Digital Form." *Digital Humanities Quarterly* 11, no. 2. <http://www.digitalhumanities.org/dhq/vol/11/2/000293/000293.html>.
- Sichera, Pietro, Laura Mazzagufu, Angelo Mario Del Grosso, and Daria Spampinato. 2023. "Metodi di armonizzazione per codifiche TEI cooperative: L'edizione Bellini Digital Correspondence." In *La memoria digitale: Forme del testo e organizzazione della conoscenza*. Edited by Emmanuela Carbé, Gabriele Lo Piccolo, Alessia Valenti, and Francesco Stella. XII Convegno Annuale AIUCD. Siena: 185–90.
- Viglianti, Raffaele. 2016. "Music and Words: Reconciling Libretto and Score Editions in the Digital Medium." In *Ei, dem alten Herrn zoll' ich Achtung gern': Festschrift für Joachim Veit zum 60. Geburtstag*, edited by Kristina Richts and Peter Stadler, 727–46. Munich: Allitera Verlag. <https://doi.org/10.25366/2018.46>.

NOTES

1 <http://bellinicornespondence.cnr.it>.

- 2 By *distributed edition*, we refer to an editing model that develops across different locations and at different times (Cristofaro et al. 2023).
- 3 <https://www.verovio.org/mei-viewer.xhtml>.
- 4 <http://evt.labcd.unipi.it/>.
- 5 In this work, the namespace will always be specified for TEI elements; for all other MEI elements mentioned, it is explicitly indicated only when there might be confusion with similar or homonymous TEI elements.
- 6 “In altra mia mi diffonderò di più; per ora sappia che *I Puritani* di sera in sera più fanno fanatismo, e che in tutto Parigi non si parla d’altro” (Vincenzo Bellini to Vincenzo Ferlito, in Paris, 4 February 1835).
- 7 “Il pedamento d’un’opera.” Vincenzo Bellini to Giovanni Galeota, in Paris [February 1834].
- 8 “. . . scelta del libro oggimai . . . più difficile ancora di comporre [struck out in the original] dell’istesso creare musica.” Vincenzo Bellini to Giovanni Galeota, in Paris, 14 February, 1834.
- 9 “La mia salute è sana, e di già ho intrapreso la nuova fattiga,[struck out in the original] sono applicato alla nuova opera che deve darsi alla Scala pel 26: di Dicembre prossimo: essa porta per ti è la poesia[~~struck out in the original~~] Il soggetto è *Norma* tragedia di M:r Soumet: io la trovo interessante e se Romani ne ricaverà una bella poesia potrà venire un bel *libretto* [emphasis in the original].” Vincenzo Bellini to an unknown recipient, in Milan, [September 1831].
- 10 “. . . giornalmente . . . dei motivi.” Vincenzo Bellini to Francesco Florimo, in Milan, 21 June 1828.
- 11 “Idee pronte.” Vincenzo Bellini to Francesco Florimo, Milan, [after 11 March] 1828.
- 12 “Io sono applicato, e cerco di provvedermi di mottivi, e ne vado facendo non cattivi, che spero avendo il libro di situarli, e svilupparli con effetto.” Vincenzo Bellini to Francesco Florimo, in Milan, 7 July 1828.
- 13 Translation from Italian is by the authors. Please refer to [Mantica 2020](#) for a more accurate physical and codicological description of the manuscript witness, which is only mentioned here in those aspects that concern the text encoding.
- 14 The same numbering system for the studies and pages is adopted here as in [Mantica \(2020, 31\)](#).
- 15 [Mantica \(2020, 39\)](#) identified eighteen studies that are definitively traceable in the score of *I Puritani*.

- 16 The proposal to expand these and subsequent abbreviations is credited to Mantica (2020, 37), and is detailed in a table outlining the expansions of all similar abbreviations.
- 17 <https://music-encoding.org/guidelines/v5/content/index.html>.
- 18 The full XML-MEI file is available on the GitHub repository at <https://github.com/LauraMazzagufu/StudiGiornalieri>.
- 19 <https://music-encoding.org/guidelines/v5/elements/staffDef.html>, <https://music-encoding.org/guidelines/v5/elements/scoreDef.html>.
- 20 “Due pezzi compostire sta a distrumentarli e metterli bene insieme, perché ho i mottivi principali preparati ed aspetto Pepoli che mi finisca un duetto che ne spero molto.” Vincenzo Bellini to Francesco Florimo, in Puteaux, October 4, 1834.
- 21 “Ha il gran difetto che non è bene dialogato: le situazioni sono belle, l’espressioni ripetute, comuni, stupide qualche volta, in una parola si vede che chi l’ha scritto non avea né cuore, né cognizioni per bene esprimere i sentimenti dei suoi personaggi.” Vincenzo Bellini to Vincenzo Ferlito, in Paris, 18 May 1835. See also letter LL1.16 (Vincenzo Bellini to Carlo Pepoli, in Puteaux, 26 June 1834), wherein Bellini requests Carlo Pepoli’s delivery of the verses of “A te, o cara, amor talora” (no. 4, chorus and Arturo’s cavatina, Act 1 of *I Puritani*), asserting that he had already completed the drafting of the entire duet of the preceding number (no. 3, Giorgio and Elvira’s duet “Sai come arde in petto mio” in Act 1), thus offering valuable insight into his score-writing process and his collaboration with the librettist.
- 22 <https://www.w3.org/TR/annotation-model/>.
- 23 <http://hdl.handle.net/20.500.11752/OPEN-1000>. More effective strategies for the retrieval of individual letters will soon be implemented in this context to facilitate immediate access to external resources. For instance, the Digital Object Gateway mechanism (DOG, <https://www.clarin.eu/dog>) is currently being integrated into CLARIN’s research infrastructure and may potentially solve the aforementioned problem.

AUTHORS

LAURA MAZZAGUFO

is currently a temporary research fellow at the Institute of Cognitive Sciences and Technologies (ISTC)—National Research Council (CNR) in Catania, Italy. She graduated in musicology from the University of Pavia, and in Digital Humanities from the University of Pisa. She actively contributed to the Bellini Digital Correspondence project. Her research interests encompass text encoding and music philology.

PIETRO SICHERA

is a Technologist Director at the Istituto per il Lessico Intellettuale Europeo e Storia delle Idee (ILIESI)—National Research Council in Rome, Italy. He earned his degree in computer science from the University of Catania and obtained his PhD degree in Lexicography and Semantics of European Literary Language, furthering his expertise in the study of the Italian language through the concordance method. He has developed proprietary software for text analysis on Italian poets of the twentieth century, including NormaTEI, DH Awards 2023 winner for Best DH tool or suite of tools category.

DARIA SPAMPINATO

is a technologist at the Institute of Cognitive Sciences and Technologies (ISTC)—National Research Council in Catania, Italy, specializing in computer science with a focus on digital humanities. She was for nine years a member of the board of the Italian Association for Humanities and Digital Cultures. Her research interests cover digital philology and digital epigraphy, and she is actively engaged in the Bellini Digital Correspondence project. Currently, she is the CNR scientist research unit head of two national projects: PAVES-e (Towards an Archive-Edition of Pavese's Work) and COVERLeSS (Corpus Online of Verism between Literature, hiStory and Society).

ANGELO MARIO DEL GROSSO

is a software engineer; he earned his PhD in information engineering with a thesis on the design of software components for textual scholarship. Since 2019, he has been a tenured researcher at the ILC—National Research Council (CNR) in Pisa. His main research activities encompass the representation and processing of philological resources. His interests range from the formal modeling of texts to the computational analysis of textual documents. He is involved in various research projects both nationally and internationally and teaches text encoding at the University of Pisa.