

Italian music libraries and open access digital music archives : Issues and challenges

Carmela Bongiovanni¹

*Previous versions of this text were delivered at two conferences in 2023: University of Zagreb (HR), 25-29 September 2023, 1st International Library Staff Exchange Week: "Open access music repositories and the evolution of music libraries"; QQML 2023, 15th Qualitative and Quantitative Methods in Libraries International Conference, 30 May-3 June 2023, online presentation: "The Future of Music Libraries with Historical Heritage in Italy: Research and Innovation".

¹ Conservatory of music 'Paganini', Genoa, Italy

Abstract:

Why has the digitisation of Italian Conservatory libraries not really got off the ground and, with a few exceptions, is still stagnating? This case study attempts to answer these questions. We are faced with two different but related issues: on the one hand, the creation of repositories of digitised music collections (a means desired and supported by everyone, even by those who do not have or do not want to get used to electronic devices, such as musicians who prefer and use exclusively or almost exclusively paper) and, on the other hand, the use of electronic devices as a means of studying and performing music.

As far as Italian Conservatory libraries are concerned, the use of commercial digital library services is spreading. In addition, there is currently a lack of digitisation projects for early, rare, or notable music collections: with the exception of the digital collections of a few Conservatories, such as those of Naples and Milan, Brescia, Florence and some others, there are no particular innovations in the digitisation of historical music Conservatory libraries.

Keywords: *Italian music libraries, Italian Conservatories, Music digital libraries, OPAC SBN, Internet Culturale, Central Institute for the Digitisation of Cultural Heritage (Italy)*

1. Introduction: the current state of Italian music libraries and online resources

Digital transition is now both a goal and practice for most Italian institutions (De Natale, 2023); it is of course affecting Italian Conservatory libraries as well. The latter are currently in a transitional phase, on the threshold of a vast change. After the well-known, yet unfinished reform of the *Alta Formazione Artistica Musicale* (AFAM) (Law no 508, dated 21 December 1999), PhDs in music have recently been introduced in Italian Conservatories. It is hoped that this innovation will also bring an enrichment to the services offered by AFAM libraries, enhancing their documentation together with new projects to promote the rare and ancient heritage (<https://www.mur.gov.it/it/aree-tematiche/afam/bandi-dottorati-afam>).

This article aims to explore the issues, challenges, and possible ways to improve and expand library resources for advanced study in the new music research programmes (PhDs) that have recently started at Italian AFAM institutions. It will be addressed as a case study, using open data summarised in tables taken from OPAC and web catalogues, in order to understand how Italian Conservatory libraries are facing the challenge of the digital transformation of culture.

There is a lack of studies on users' information needs with regard to digitised collections from the historical music archives of public institutions (e.g., as was done with a folk music library by Inskip, Butterworth, and MacFarlane, 2007). Indeed, several studies have been conducted to assess and investigate the impact of new digital music services and digitally born resources on library management (Scott and Shelley, 2022; Berndt and Malmon, 2023; Clark, Abbazio, and Saucedo, 2025, etc).

In Italy, however, given the vast wealth of musical manuscripts, little attention seems to have been paid to discussions on the qualitative selection of musical collections to be digitised and on how to organise digital music libraries, nor, at least in Italy, have any surveys been conducted among users, with the exception of a 2020 study (Di Domenico, ed. 2020). There are few studies on the impact of digitizing musical heritage on different categories of users (musicians, scholars, students, enthusiasts). We are still in the beginning stages in this area in Italy.

1.2 Music catalogues and National Library Service OPAC

Italian Conservatory libraries are conservation establishments where musical activities and performances in previous centuries are documented on a local and national level. A qualitative and quantitative survey was recently conducted on these libraries in the years 2017-2020, resulting in a publication with a selective bibliography on the subject (Di Domenico, ed. 2020). The library survey included, under point 41, three questions on 'Digitisation as of 2017' (p. [71]). Currently, only the Digital Library set up by the Milan Music Conservatory, with more than 2000 items uploaded, is accessible via a separate website (<https://search.bibliotecadigitale.consmilano.it/>). Other Conservatory libraries made their digitisations accessible through the ICCU databases and Europeana

(<https://www.europeana.eu/it>). A large amount of music printed before 1900, in the public domain, has been or is in the process of being digitised online. This is why network bibliographies and catalogues as data aggregators (e.g. the collective catalogue of Italian libraries managed by the Central institute for the union catalogue of Italian libraries and bibliographic information, ICCU <https://www.iccu.sbn.it/it/>, OPAC Union catalogue of the National Library Service, SBN <https://www.sbn.it/>) are important for users.

The large Italian music manuscript heritage has only been partially reordered and catalogued to date; as a result, digitisation projects have been implemented where effective cataloguing campaigns have led to a certain completeness in the bibliographic documentation (Kempf, 2013). The current lack of comprehensive catalogues of music collections has influenced the digitisation of music.

We should also consider the importance of catalogues, both printed and web-based, as documents that could outlive the same musical resources in the future, as they did in past centuries. Quite successfully, the Italian OPAC SBN has extended the musical incipit for online searching of manuscript scores, even in the presence of complete digitisations.

1.3 Music editions born digital

Concerning small and medium sized academic music libraries, digitised open access music involves, among others, two important aspects (Goodchild, 2017): 1. digitisation of historical and modern collections, metadata and thus creation of digital music libraries and their maintenance (institutional level projects, mostly financed by funds outside the Conservatories); 2. modern music editions born digital, both by contemporary and ancient composers, with dedicated software online (Akau, McKinney and McNellis, 2023). Among several international examples of the second type are the complete works of composer Luca Marenzio (1553-1599) and the editions of the Web Library of Seventeenth-Century Music (WLSCM). The aim is always the same: making music available and thus searchable on the Web.

1.4 Contemporary music and Italian private partnerships

Given the presence of considerable historical collections, the relationship with music from the past is very strong in Italian music libraries. As far as contemporary music is concerned (Berndt and Malmon, 2023), currently, some Italian associations and foundations are directly involved in the preservation and digitisation of archival and musical holdings belonging to contemporary musicians and institutions; the Giorgio Cini Foundation in Venice holds collections of contemporary composers and musicians, made digitally accessible online. This is the case, for example, of NOMUS, an association based in Milan, founded in 2013, one of not many Italian private institutions dedicated to the study and preservation of modern and contemporary music. The association's founder, Maria Maddalena Novati, devoted herself to the recovery and cataloguing of sound recordings made by the Studio di Fonologia di Milano (1955-1983) (<https://www.nomusassociazione.org/fondo-fonologia>). The

NOMUS library's modern music collections are also indexed in the RISM, and since 2017 in the Union Catalogue of National Library Service (SBN). The association has uploaded 214 videos to You Tube, evidence of its performance activities and also dissemination of contemporary music.

As far as digitised open access music repositories are concerned, we note the practice by contemporary composers of self-publishing on personal websites, or the possibility of browsing compositions by contemporary authors, by choice of consortia of publishers (in this case, open access of a predominantly if not exclusively commercial nature) (Szeto, 2018; Berndt and Malmon, 2020; Dougan Johnson, 2020). Concerning born-digital music archives, several authors have suggested a reflection on how to preserve, access and manage these diversified music resources (*Digital Score Platforms for Libraries*; Jones, Rich, Schaub, Smith-Borne, 2024).

Nowadays, contemporary music enjoys visibility on the Web, even through different commercial or institutional sites and databases that allow different ways of interfacing with its content (Bonjack's OA resource guide <https://libguides.colorado.edu/prf.php?id=598fc7cb-7cdb-11ed-9922-0ad758b798c3>; Vest's guide to the UCLA Contemporary Music Score Collection <https://guides.library.ucla.edu/ContemporaryScores>; Berndt and Malmon, 2023; the *Contemporary Composers Web Archive*). These and other resources are highly valuable for Conservatory teaching, to stimulate awareness of new possibilities for performing music outside the traditional canons of academic institutions. Petrucci Music Library is something of a hybrid because, as already noted (Brady, 2019; Tallman, <https://scholarship.claremont.edu/>, 19), it includes music in the public domain and also copyrighted music by contemporary composers and arrangers who choose to make it available (https://imslp.org/wiki/Category:People_from_the_Modern_era), etc.

A problem addressed by scholars and the focus of discussions among library colleagues is how to achieve bibliographic control and at the same time acquisition of those musical materials (scores, sheet music, parts, etc.) that originate and remain digital, as in the case of compositions by contemporary authors or arrangers directly distributed on their commercial websites (Stokes and Perricci, 2015; Dougan Johnson, 2020; Berndt and Malmon, 2023). Other issues at the focus of discussions about these 'music scores born-digital formats', concern copyright and the possibility for libraries to manage these resources with more or less freedom (Bergland, 2024; Jones et al., 2024; Kijas, 2023).

2. Digitisation and Italian music libraries

Turning now to the Italian context, due to the widespread presence throughout the territory of old music collections, the situation of music digitisation with regard to these Italian music resources held in general and specialized, public and private, ecclesiastical and civic libraries is truly uneven. While a complete list of all Italian digitised music collections made available on the Internet is missing, some interesting projects have been implemented, or are in progress: besides Internet Culturale music projects, and the Alfabetica portal, is now

active the Central Institute's National Plan for the Digitisation of Cultural Heritage (PND) (<https://digitallibrary.cultura.gov.it/il-piano/>).

2.1 Italian music digital collections

An example of library within the public field, rather famous for its unique character, is the RAI National Symphonic Orchestra's Historical Archive in Turin, now partially digitised (Malvano, 2020).

Some of Italian main libraries have more digital repositories where music collections can be found: the Biblioteca Estense Universitaria in Modena, for instance, displays in its digital library music editions and manuscripts that integrate the digitised 17th century manuscript music collection on the Internet Culturale: <https://edl.cultura.gov.it/media/ricercadl?rictip=Spartiti%20Musicali> (Zanni, 2019).

Among the problems posed by OA in music, one concerns the need for a certain visibility of these digital music collections, and to be searchable and thus retrievable. As noted in some other contexts (Testa, 2016), the same basic problem remains for Italian open access music repositories, namely the lack of a single catalogue for music libraries. Another problem is the quality of open access music, especially in cases of modern music transcription files made with music notation softwares uploaded on Internet platforms (e.g. Choral Wiki).

2.2 Music digitisation and the Union catalogue of the National Library Service (SBN)

As far as the digitisation of the Italian music collections is concerned, the situation is rather static: as stated in the opac.sbn.it catalogue, on the 15th September 2023, 918,562 different resources were digitised in the powerful search database set up by the National Library Service with a comprehensive 'music' access point. Excluding music theory treatises, letters or booklets by musicians, librettos and the like, but focusing exclusively on printed and manuscript music, there were 10664 printed music editions and 20476 digitised music manuscripts. By 18 July 2025, the digitisation process at national level is showing its albeit slow increase exclusively in music editions, while manuscripts appear to have decreased: 32016 digitised music editions and music manuscripts, including 12248 musical editions and 19768 digitised music manuscripts (see Table 1). All numbers referring to digitised music editions are misleading as they are partly the result of shared previous digitisations already available on different digital portals or OA libraries.

Other libraries provide their digital music holdings on various showcases and portals, sometimes making research quite complex. For example, the digitisation of some of Niccolò Paganini's musical autographs, preserved in the Casanatense Library in Rome, are currently visible, with a detailed historical and bibliographical description by a number of scholars, not within the Casanatense digital library, but on the site of the Centro Paganini (Friends of Paganini Association) in Genoa (<https://www.centropaganini.it/biblioteca-digitale/i-manoscritti-paganiniani-della-biblioteca-casanatense-a-roma/>). The existence of

a collective catalogue has made it possible to overcome the concept of a 'closed' digital music library, and to avoid the risk of cover-ups (Goodchild, 2017, p. 47). Nevertheless, something is still left out. In short, we detect a certain fragmentation of digital repositories, even within the same library, not always connected to one OPAC.

In practice, in Italy, few music libraries have their own 'digital libraries' or belong to local digital libraries such as the Digital Library of Lombardy; at the same time, few libraries have published digital music collections on platforms such as Internet Culturale. Most of them only share 'digital items' by sharing links and metadata in the Union Catalogue of the National Library Service (OPAC SBN) or by using free digital libraries such as Internet Archive (e.g. Conservatory Library of Lucca). In the first case, however, SBN's music search mask replaces the 'single one-stop search platform' already mentioned by scholars (Goodchild, 2017, p. 38).

Checking the data available via the new Alfabetica portal (Cerullo, 2022; Incelli and Mataloni, 2022) on 18 July 2025, there are 19.917 digitisations of music manuscripts, while the number of digitised music editions are 13.379, which is over 1000 items higher than those appearing in the OPAC SBN on the same day (See Table 1). On the other hand, in the case of Alfabetica, the query takes place in several databases (OPAC SBN, EDIT16 and MANUS online) and not only in one. Digitised resources in the SBN OPAC are not always visible via Internet Culturale, so searches have to be done in the two separate databases, at least for the time being. The digitisation of music is progressing with a limited drop.

2.3 Music manuscripts cards in OPAC SBN and URFM (Ufficio Ricerca Fondi Musicali of Milan)

The gap between records and digitisations is likely to widen in the coming years, as the cataloguing of music manuscripts in the OPAC SBN seems to have increased dramatically recently. These records are reaching incredible heights when compared to those collected up to about three decades ago and visible in the National Catalogue of Music Manuscripts of the Ufficio Ricerca Fondi Musicali in Milan (URFM). The latter lists approximately 162,000 music manuscript records, many of which with several mss. in a single card, a small percentage with musical incipits. It should be noted, however, that the over 100,000 additional manuscripts catalogued in the OPAC SBN are not comparable, as the two databases do not overlap. Many music manuscripts recorded in the URFM database have yet to be catalogued in the OPAC SBN and, conversely, many music records in the National Library Service Union Catalogue have never been included in the URFM census. As noted many years ago (Riva, 2001), the RISM shows records of manuscripts preserved in Italy that only partially match the two databases. Table 2 shows the number of music manuscript records in the URFM and the current amount (18 July 2025) of music manuscripts in the SBN collective catalogue of the top ten Conservatory libraries in SBN for number of records.

In short, no database can be excluded in the search at present, not even the obsolete URFM records.

2.4 Digitised music mss. visible through OPAC SBN and Alfabetica.

In terms of the digitisation of music manuscripts, the Conservatory of Naples leads the way with a total of 11571 items, an unusual case in Italy of substantial public investment in music cataloguing and digitisation, followed by the library of the Palatina Music Section of Parma with 2628 manuscripts, the Conservatory of Florence with 1327 manuscripts and the Biblioteca e Complesso Monumentale dei Girolamini and the Archivio Musicale della Congregazione dell'Oratorio of Naples, both with 721 music manuscripts. Below we find other libraries, but with even smaller numbers compared to their holdings.

Searching for music through the main Italian network catalogue OPAC SBN is not straight forward; it is often necessary a combination of different fields proposed in the advanced search together with logical operators. Music 'advanced' search mask requires an expert user.

The Alfabetica portal has a very simple single field search, with a tick box to limit the search to digitised items, and a response classified by genre; it is a portal designed for a wider audience. Alfabetica cannot, however, replace the specialised research on music available in the OPAC SBN (e.g. by instrumental ensemble, musical incipit, elements of the work title, etc.). Alfabetica is expected to expand to include other external databases: <https://alfabetica.it/informazioni>.

Only sporadic, albeit significant, funding – as in the case of Naples, Milan, Florence and a few other Conservatory libraries – has led to effective and long-lasting projects for the digitisation of ancient sources and their online preservation through descriptive metadata. Other smaller Conservatory libraries, such as Brescia, have been able to create digital libraries from their rare and valuable music collections thanks to specific funding, in the example cited from the Lombardy Region (<https://www.bdl.servizirl.it/vufind/>). On 18 July 2025, the Digital Library of Lombardy contained 851 music manuscripts and 2813 digitised music prints belonging to the Conservatory of Brescia. Larger projects involving several conservatories and their ancient library collections would be required.

3. Music search masks, network catalogues and digitisation projects

The music search masks in the OPACs need to be improved in terms of searching by instrumental ensemble combined with historical period, which is not currently possible with the SBN OPAC's comprehensive 'music' access point. On the other hand, this is a common problem with other foreign libraries (Holden, Knop and Newcomer, 2019). We do not actually have a music search by time period: the search mask is designed to search for verbal texts, not music. For instance, Petrucci Music Library has developed a number of search options adapted to the needs of music and musicians

(https://imslp.org/wiki/Browse_people_by_time_period) (Mullin, 2010). It is obvious that the most difficult searches are those where several elements have to be combined: e.g. contemporary sacred music or string trio from the middle baroque period, etc. The search for music with specific criteria, different from those of the verbal text, remains a challenge (Grossi and Schiavone, 2024).

The OPAC SBN is a constantly evolving tool and this is certainly a positive feature. As Alan Howard writes, one of the positive features of the web and databases is the ability to continually improve catalogues, and thus to keep up with innovations and changes in the description of music (Howard, 2010).

It is not only a question of implementing online music archives with Creative Commons licences, but also of creating the right conditions for these archives to be properly used by musicians, i.e. to allow searches into these music libraries specifically designed for music. The digitisation of all the manuscript music in the historical collections of Italian music libraries is a goal that is still too distant to be feasible and perhaps very difficult to achieve (Tangari, 2006). The major Italian library catalogue (OPAC SBN) contained 277555 music manuscript records by 18 July 2025, just over 7% digitised (Alphabetica provides a few dozen more digitised music manuscripts). As a benchmark, at the same time, the international RISM repertoire indicated more than approximately 1,300,000 music manuscript results (many of them, of course, preserved in Italy). In short, since 2017, the SBN OPAC has been one of the largest thematic catalogues open access online (Ward, 2023).

3.1 Internet Culturale and other Italian digitization projects

As far as Internet Culturale is concerned (Table 1), on 18 July 2025, 24475 music manuscripts and 3963 music editions had been digitised; as already stated, only a part of these manuscripts and music editions correspond to those visible on other ICCU portals (in particular OPAC SBN). Thus, as already mentioned, we still find music resources described in the OPAC SBN database whose digitisation can only be found on the Internet Culturale website; e.g. see BID MUS0242021 in the OPAC SBN: this digitised printed edition of Cimarosa's aria 'Se cerca se dice', published in Venice by Antonio Zatta, can be found on the Internet Culturale website (ID: FR0084-01E06_01ak). The presence of multiple databases, added to the fragmentation of digital music archives, certainly does not ease the search.

Open access to Italian historical music collections in Conservatory libraries is still at an early stage. A complete and comprehensive catalogue of all music manuscripts held in Italian libraries and archives is currently lacking (Taglietti, 2022); with respect to 'at least' printed music to 1800, the OPAC SBN online catalogue 'should' have achieved a higher degree of completeness (certainly not with regard to 19th century music editions).

In terms of digitisation, ICCU has published 'Guidelines for Digitisation and Metadata' through the Italian Digital Library Board, and has recently funded a few music digitisation projects, subsequently uploaded to the Internet Culturale website. In this context, the I.PaC (Digital Infrastructure and Services for

Cultural Heritage) comes into play with a few initiatives fostering a rapid digital transformation of Italian cultural institutions.

I have previously stated that, most Conservatory music libraries, that have joined the SBN, list digitised documents that are actually shared (Table 3: see the list of digitised printed music taken from the Alfabetica portal). This is one of the benefits of being part of a union catalogue: the ability to plan digitisation in a more organised and rational way; digitisations are linked to shared records. Given these issues, the conclusion is far too simple: there is a need for one definitive catalogue of all Italian music editions and manuscripts, exceeding the URFM and, if possible, a single digital music library linked to the same catalogue. It remains to be seen whether indeed Alfabetica can constitute this definitive goal for music, given the great ease of the proposed search.

4. Music retrieval and digital music libraries

In the fields of music and musicology, digitisation is particularly seen as a means of speeding up open access to musical sources and reducing the cost of reproducing them, when this is not considered to be useful for study and performance, thereby expanding the historical and contemporary music repertoire and ultimately spreading a deeper knowledge of music in a broader sense. The digitisation of whole ancient and modern music collections does not only provide advantages in the dissemination, speed of use and accessibility of music collections; as others have already pointed out (Paakkonen - Kervinen - Kettunen, 2018), the diversity of media can be a carrier of knowledge, stimulating creativity in the reuse of materials.

4.1. Petrucci music library, Internet Archive and Italian OPAC

Besides the long-standing problem regarding music searching in OPACs already mentioned above (Lisena et al., 2018), it is essential to improve the retrieval of digital music libraries and their content (Suber, 2012); this is not always easy, despite the amazing gathering power of websites such as the Petrucci Music Library. Therefore, the metadata of digitised music, especially vocal music, needs to be improved and developed by adding lists of scenes and arias, such as the digitised operas of the Sächsische Landesbibliothek - Staats- und Universitätsbibliothek (SLUB), Dresden (D-DL) and other German libraries, and also to enhance the bibliographic records of music manuscripts and anonymous prints by adding musical incipit; finally, to link the records of the Union catalogue of the National Library Service and the digital music editions of the Petrucci Music Library and other major digital libraries, as mentioned above, in order to make the universe of digitised music editions more usable and searchable, while at the same time exploiting the potential of the 'music' access point of the SBN Union catalogue (Grossi and Schiavone, 2024; Bongiovanni, 2018). This practice is now a well-established tradition.

The Petrucci Music Library (IMSLP) is a huge music library, a content aggregator that has made searchability its strength. Like other private initiative platforms, it offers free use as well as a subscription option to take advantage of

additional resources, including a fast download, as well as some features for sale, such as the possibility of purchasing parts (and scores) from a number of publishers, including Baerenreiter (<https://imslp.org/wiki/IMSLP:Subscriptions>). However, as already noted, this does not take away from the need to create institutional repositories by conservatories' libraries.

The option of linking records to the same music digitised by others could only improve the services offered by the libraries of small music academies in Italy (Scott, Harrington and Dubnjakovic, 2021; Jones et al., 2024). Today, in practice, many web catalogues allow linking to digitised music documents or to open access digital resources: in the case of the OPAC SBN and music, this possibility is already exploited by some libraries. Thus, we are now witnessing a shift from the participatory cataloguing of Italian libraries to joint digitisation (in this case of music) between institutions in different countries.

Speaking of digital and multimedia libraries, the Biblioteca Nazionale Centrale in Florence (BNCF) has recently started using the Internet Archive's e-library to upload its own digitisations of 19th and 20th century music editions by composers that have fallen into the public domain. I counted 685 records of digitised music editions published between the 19th and 20th centuries (last query 18 July 2025). The BNCF is also involved in the Early European Books project, while the BNCF's collection of manuscripts and incunabula can be consulted at <https://teca.bncf.firenze.sbn.it/manos/>. Online access and sharing of open access digital resources, most of which are already on the web and linked to descriptive bibliographic records, is an established feature of international directories and network bibliographies (CORAGO, OBPS).

If the dematerialisation of modern music collections is progressing rapidly, and important music service providers are joining the didactic collections of Italian Conservatory libraries, students and teachers still need training in music research, and it is essential to invest in this as well.

5. Conclusions

The lack of an overall national digitisation project covering all public music libraries in Italy is being noted, in addition to the problems of digital library fragmentation, lack of institutional repositories already highlighted, and the absence of digital expertise within the Conservatories themselves.

The road to a wider digitisation campaign for the early music collections of Italian Conservatory libraries is far from complete. However, we now have a greater awareness of the need to tackle the problem of digitisation and metadata of early music collections in Italy in an organic and collaborative way: the existence of collective catalogues such as the OPAC SBN, which allows the sharing of digitised resources from innumerable databases, is a solution to the age-old problem of finding metadata and digitised objects. Currently, a few concrete projects for digitising music seem to be based on public and free platforms such as the Internet Archive, or on local digital libraries such as the Biblioteca Digitale Lombarda, whereas of the over 28,000 digitised printed and manuscript music results on the Internet Culturale

(<https://www.internetculturale.it/it/825/spartiti>), nearly 13,000 come from Italian Conservatory libraries, mainly from the Naples Conservatory.

Nowadays, we are still waiting a general regulatory framework for digitisation specific to Conservatory libraries. Italian Conservatories' libraries have acted in a haphazard manner, through occasional funding opportunities and synergies.

Everyone agrees on the need for digitisation, even though there is a lack of technical offices in charge of digitising the archival and bibliographic collections of the Conservatories. In order to develop future digitisation procedures specific to Italian Conservatories, we suggest a path that can foster collaboration between institutions, human resources, and technologies. It should not be developed locally, based on occasional or random funding opportunities, events, or partnerships, but rather according to specific policies developed centrally by the Ministry of Higher Education, such as those followed for other innovations in the field of Conservatory libraries (for example, to increase library staff).

Following the example of other nations, it is hoped that the URFM, which has always been a crucial reference point for the cataloguing of music in Italy, will play a role as a coordination centre for projects aimed at promoting the musical heritage of conservatories through digitisation initiatives.

Furthermore, the presence of a library of digitised old music collections implies a comprehensive online catalogue full of metadata, which some Italian Conservatory libraries still do not have today.

Finally, returning to digital music libraries in the Italian context, what Manuela Grillo recently said about culture in general can be applied to the specific case of music: «The web-based economy founded on knowledge sharing suffers today from a gap in public domain content: only 10 per cent of Europe's cultural heritage is digitised» (Grillo, 2023, p. 346: «L'economia di rete fondata sulla condivisione di conoscenza soffre oggi un gap di contenuti di pubblico dominio: appena il 10% del patrimonio culturale europeo è digitalizzato»). The percentage decreases when we focus exclusively on music. The future or evolution of music libraries will be all about providing web-based services to their users, but it also shows a hybrid identity (see Penner, 2024). Knowledge of music, of course, comes from a straightforward understanding of it, and thus from the possibility of comparing musical incipits, or even using programmes for analysing and extracting musical data by applying them to digital libraries (Goodchild, 2017).

References

- Akau, Stephanie, McKinney, Janet and McNellis, Rachel (2023). Preferred Preservation Formats for Digital Music Scores: A Survey of University Music Faculty. *Notes*, 79, no. 4: 495-523.
- Bergland, Kristi (2024). Beyond the mechanics: Exploring ethical considerations of E-Scores in music libraries. *IAML Stellenbosch 2024*, 23 June – 28 June 2024 Programme with abstract available at https://www.iaml.info/sites/default/files/pdf/programme_with_abstracts_0.pdf

- Berndt, Elizabeth and Malmon, Sandi-Jo (2020). Surveying Composers: Methods of Distribution, Discoverability, and Accessibility of Their Works and the Corresponding Impact on Library Collections. *Fontes Artis Musicae*, 67, no. 2: 81-98.
- Berndt, Elizabeth and Malmon, Sandi-Jo (2023). Surveying Composers Part II: Perspectives on Composer and Library Engagement for the Future. *Fontes Artis Musicae*, 70, no. 1: 1-15.
- Bongiovanni, Carmela (2018). *Introduzione alla bibliografia musicale. Istituzioni, risorse, documenti*. Milano: Ledizioni. ISBN 978-88-6705-839-6.
- Brady, Sophie A. (2019). Review: International Music Score Library Project [IMSLP]. *Journal of the American Musicological Society*, 72, no. 3: 920-935.
- Cerullo, Luigi (2022). L'Ecosistema digitale dei servizi bibliografici nazionali: una panoramica. *Digitalia*, 17, no. 1: 31-38.
- Clark, Joe C., Abbazio, Jessica M. and Saucedo, Jonathan (2025). Music faculty after pandemic closures: a mixed methods study of evolving resource preferences and libraries. *Notes*, 81, no. 3: 455-488.
- De Natale, Mariateresa (2023). Istituzioni culturali e riuso del patrimonio culturale digitale: buone pratiche a livello internazionale. *Digitalia*, 18, no. 2: 155-161.
- Di Domenico, Giovanni ed. (2020). *Le biblioteche dell'Alta Formazione Musicale. Prove di monitoraggio e valutazione*, with Anna Bilotta and Maria Senatore Poliseti. Milano: Ledizioni. ISBN 9788855262941.
- Di Domenico, Giovanni (2020). Per le biblioteche dei conservatori e degli istituti superiori di studi musicali: un progetto di valutazione e un volume. In Di Domenico Giovanni ed. *Le biblioteche dell'Alta Formazione Musicale. Prove di monitoraggio e valutazione*, with Anna Bilotta and Maria Senatore Poliseti (pp. 7-16). Milano: Ledizioni.
- Dougan Johnson, Kirstin (2020). The changing face of academic music media collections in response to the rise of online music delivery. *Notes*, 77, no. 2: 191-223.
- Goodchild, Meghan (2017). Digital Music Libraries: Librarian Perspectives and the Challenges Ahead. *CAML Review / Revue de ACBM*, 45, no. 2-3: 32-57.
- Grillo, Manuela (2023). Tutela e gestione del diritto d'autore in open access. *AIB Studi*, 63, no. 2: 337-353, at 346. <https://aibstudi.aib.it/article/view/13900/12108>
- Grossi, Michela and Schiavone, Roberta (2024). Beyond the score: l'indicizzazione della musica notata per la performance. *AIB studi*. 63, 3: 619-640. <https://doi.org/10.2426/aibstudi-13983>.
- Holden, Chris – Knop, Keith – Newcomer, Nara (2019). Music Discovery: Past, Present, and Future. *Notes*, 75, no. 4: 591-619.
- Howard, Alan (2010). Review: Christ Church Library Music Catalogue. *Music and Letters*, 91, no. 1: 91-94.
- Incelli, Egidio and Mataloni, Maria Cristina (2022). OPAC SBN: innovare i servizi nel solco di una solida tradizione. *Digitalia*, 17, no. 1: 58-65.
- Inskip, Charles – Butterworth, Richard – MacFarlane, Andrew (2007). A study of the information needs of the users of a folk music library and the implications for the design of a digital library system. *ScienceDirect. Information Processing and Management*, 44, no. 208: pp. 647-662.
- Jones, Michael – Rich, Robert – Schaub, Jacob – Smith-Borne, Holling (2024). Using Alma Digital to Provide Access to Digital Scores: One Music Library's Experience. *Fontes Artis Musicae*, 71, no. 3: 195-207.
- Kempf, Klaus (2013). La politica di digitalizzazione della Bayerische Staatsbibliothek. *Digitalia*, 8, no. 1: 14-28.
- Lisena, Pasquale, Achichi, Manel, Choffé, Pierre, Cecconi, Cécile, Todorov, Konstantin Jacquemin, Bernard and Troncy, Raphaël (2018). Improving (Re-)Usability of musical

- datasets: an overview of the DOREMUS Project. *Forschung und Praxis*, 42, no. 2: 194–205.
- Malvano, Andrea (2020). The Digital Project of the Rai Archive: Catalogue, Chronology and Study of the Italian Broadcasting Orchestra. *Music Reference Services Quarterly*, 23, no. 1: 1-14.
- Mullin, Casey A. (2010). Review: International Music Score Library Project/Petrucci Music Library. *Notes*, 67, no. 2: 376-381.
- Paakkonen, Tuula – Kervinen, Jukka – Kettunen, Kimmo (2018). Digitisation and Digital Library Presentation System – Sheet Music to the Mix. Proceedings of the 1st International Workshop on Reading Music Systems, ed. Jorge Calvo-Zaragoza, Jan Hajič jr., Alexander Pacha, Paris: 21-22 <https://arxiv.org/abs/2301.10062>.
- Penner, Katherine (2024). iPad and Digital Sheet Music Delivery: Supporting Student Development and Encouraging Digital Score Use Through Library-Circulated Hardware. *Fontes Artis Musicae*, 71, no. 3: 179-189, at 179.
- Riva, Federica (2001). Anno 2000. La catalogazione dei manoscritti musicali in Italia e un nuovo confronto con il *Répertoire International des Sources Musicales (RISM)*. In Licia Sirch (ed.), *Canoni bibliografici. Atti del convegno internazionale IAML-IASA, Perugia, 1-6 settembre 1996 (Contributi italiani)* (pp. 465-481). Lucca: Libreria Musicale Italiana.
- Scott, Rachel E., Harrington, Caitlin, Dubnjakovic, Ana (2021). Exploring Open Access Practices, Attitudes, and Policies in Academic Libraries. *Libraries and the Academy*, 21, no. 2: 365-388.
- Scott, Rachel E., Shelley, Anne (2022). Music scholars and Open Access Publishing. *Notes*, 79, no. 2: 149-178.
- Stokes, Laura, Perricci, Anna (2015). Contemporary Composers WEB Archive (CCWA): Progress in collaboratively collecting composers' websites. *IAML/IMS Reports*, New York 2015 - *The music research in the digital age*, programme of the Congress with abstracts: www.iaml.info/congresses/2015-iamlims-new-york.
- Suber, Peter (2012). *Open access*. Cambridge Mass.: The MIT Press: 100 and *passim*.
- Szeto, Kimmy (2018). The Roles of Academic Libraries in Shaping Music Publishing in the Digital Age". *Library Trends*, 67, no. 2: 303-318.
- Taglietti, Sara (2022). RISM Resources: What Exists and Where it is Kept: The State of the Art in Italy among OPACs, Card and Printed Catalogues, and New Discoveries. *International Conference Celebrating 70 Years of RISM*, Mainz, Akademie der Wissenschaften und der Literatur, 7–9 October 2022. <https://www.adwmainz.de/veranstaltungen/mediathek/medien/ansicht/rism-resources-what-exists-and-where-it-is-kept-the-state-of-the-art-in-italy-among-opacs-card-and-printed-catalogues-and-new-discoveries.html>
- Tallman, Erin (2022). *Tradition, Pedagogy, and Internet Open-Access Music Libraries*, Access date 18.07.2025 available at <https://scholarship.claremont.edu/>
- Tangari, Nicola (2006). Come cambiano le fonti musicali. Le risorse digitali e la ricerca musicologica. *Fonti musicali italiane*, 11: 289-308.
- Testa, Matthew (2016). Availability and Discoverability of Open-Access Journals in Music. *Music Reference Services Quarterly*, 19, no.1: 1-17.
- Ward, Jennifer (2023). Encoding music, decoding music history: RISM, RILM and the beginnings of Plaine & Esie Code. *Congress of International Association of Music Libraries, Archives and Documentation Centres (IAML)*, Cambridge, UK, 30 July - 4 August 2023, Programme with abstracts https://www.iaml.info/sites/default/files/pdf/iaml_cambridge_preliminary_programme_2023_07_20_abstracts.pdf

Zanni, Andrea (2019). Il progetto di digitalizzazione della Biblioteca Estense Universitaria di Modena. *Biblioteche oggi*, 37: 63-67 available at <file:///C:/Users/Utente/Downloads/959-1705-1-PB.pdf>.

Web Sites (Access date 18.07. 2025)

Alphabetica <https://alphabetica.it/web/alphabetica/musica>
 Archivio storico Orchestra Sinfonica Nazionale della RAI
<http://www.osn.teche.rai.it/Ricerca.aspx?lang=it>
 Biblioteca Digitale Lombarda (BDL)
<https://www.bdl.servizirl.it/vufind/Search/Advanced>
 Biblioteca Nazionale Centrale di Firenze (BNCF), Digital Library in Internet Archive:
<https://archive.org/search?query=subject%3A%22BNCF+-+Music%22>
 BNCF <https://www.bncf.firenze.sbn.it/collezioni-digitalizzate/>
 Calls for doctoral theses at Italian Conservatories <https://www.mur.gov.it/aree-tematiche/afam/bandi-dottorati-afam>
 Central Institute's National Plan for the Digitisation of Cultural Heritage (PND)
<https://digitallibrary.cultura.gov.it/il-piano/>
 Centro Paganini (Friends of Paganini Association) in Genoa
<https://www.centropaganini.it/biblioteca-digitale/i-manoscritti-paganiniani-della-biblioteca-casanatense-a-roma>
 Choral Wiki https://www.cpd.org/wiki/index.php/Main_Page/it
 Conservatory of Milan, Digital Library <https://search.bibliotecadigitale.consmilano.it/>
 The *Contemporary Composers Web Archive*, U.S. Library of Congress, <https://archive-it.org/collections/4019>.
 CORAGO <http://corago.unibo.it/>
 Digital Score Platforms for Libraries <https://www.iaml.info/news/invitation-iaml-online-event-panel-and-discussion-digital-score-platforms-libraries>
 EDIT16 Edizioni Italiane del XVI secolo <https://edit16.iccu.sbn.it/>
 Estense Digital Library (Modena)
<https://edl.cultura.gov.it/media/ricercadl?rictip=Spartiti%20Musicali>
 Europeana <https://www.europeana.eu/it>
 Fondazione Giorgio Cini, Venezia <https://archivi.cini.it/>
 Internet Archive <https://archive.org/>
 Internet Culturale music projects <https://www.internetculturale.it/it/753/remi>
 I.PaC Infrastruttura e servizi digitali per il Patrimonio Culturale
<https://ipac.cultura.gov.it/>
 Istituto Centrale per il Catalogo Unico *Guidelines for Digitisation and Metadata*
<https://www.iccu.sbn.it/it/internet-culturale/storia-della-biblioteca-digitale-italiana-bdi/programma-di-digitalizzazione-dei-documenti-musicali/index.html>
 Istituto centrale per la digitalizzazione del patrimonio culturale
<https://digitallibrary.cultura.gov.it/>
 Law no 508, 21 December 1999: Riforma delle Accademie di belle arti, dell'Accademia nazionale di danza, dell'Accademia nazionale di arte drammatica, degli Istituti superiori per le industrie artistiche, dei Conservatori di musica e degli Istituti musicali pareggiati,
<https://www.normattiva.it/uri-res/N2Ls?urn:nir:stato:decreto.legge:1999-12-29;508!vig=>
 MANUS Online Manoscritti delle Biblioteche Italiane <https://manus.iccu.sbn.it/>
 Marenzio Online Digital Edition (beta version) <http://www.marenzio.org/about.xhtml>
 NOMUS Association <https://www.nomusassociazione.org/>;
<https://www.youtube.com/channel/UC7Ur9m0oQDX1hIdWpzXUOzw/videos>
 OPAC SBN Union catalogue of the National Library Service opac.sbn.it.

Opera and Ballett Primary Sources (OBPS) <https://obps.lib.byu.edu/>
 Petrucci Music Library (IMSLP) https://imslp.org/wiki/Category:People_from_the_Modern_era.
 RAI Teche Archivio Storico Orchestra Sinfonica Nazionale della RAI
<http://www.osn.teche.rai.it/Default.aspx?lang=it>
 RISM Répertoire International des Sources Musicales <https://rism.info/>
 Sächsische Landesbibliothek — Staats- und Universitätsbibliothek Dresden (SLUB)
<https://www.slub-dresden.de/en/explore/music/music-manuscripts-and-early-printed-music>
 UCLA Contemporary Music Score Collection by Matthew Vest
<https://guides.library.ucla.edu/ContemporaryScores>
 University of Colorado Boulder, Open Access resource guide
<https://libguides.colorado.edu/prf.php?id=598fc7cb-7cdb-11ed-9922-0ad758b798c3>
 Ufficio Ricerca Fondi Musicali di Milano (URFM) National catalogue of music manuscripts to 1900 <http://www.urfm.braidense.it/cataloghi/catalogomss.php>
 Web Library of Seventeenth-Century Music (WLSCM) <https://www.sscm-wlscm.org/>

Table 1 Total amount of music digitisations through Italian web archives and platforms (Access: 18.07.2025)		
	digitised sheet music	digitised manuscript music
OPAC SBN (opac.sbn.it)	12248	19768
ALPHABETICA (https://alphabetica.it/web/alphabetica/)	13379	19917
Internet Culturale (https://www.internetculturale.it/)	3963	24475

Table 2 Music manuscript records in the Italian SBN catalogue of the top ten Conservatory libraries and total amount of manuscript records from the same libraries in the URFM (Accessed: 18 July 2025)		
	SBN records	URFM records
Naples	31498	12355
Venice	15068	2114
Milan	14980	13199
Genoa	7566	4740
Rome	7538	4384
Florence	6628	5336
Brescia	3546	631

Turin	3153	114
Bergamo	2898	2365
Bari	1415	-

Table 3 Digitised music in the top ten Conservatory libraries according to Alfabetica (Accessed: 18 July 2025) * Digitised printed music is widely shared **Biblioteca Digitale Conservatory of Milan (https://search.bibliotecadigitale.consmilano.it/): printed music: 1283; musical mss.: 470 *** Brescia Conservatory library through Biblioteca Digitale Lombarda https://www.bdl.servizirl.it/vufind/Search/Advanced : 2450 printed music; 546 mss.		
	Printed music*	Musical Mss.
Milan	3526**	412**
Brescia	2600***	263***
Rome (Conservatory 'Santa Cecilia')	956	-
Naples	801	11574
Bergamo	675	487
Florence	514	1327
Genoa	461	-
Trieste	351	9
Rovigo	334	63
Pesaro	319	-