

# Letters within a Comprehensive Research Tool: Archive Digitisation at the Internationales Musikinstitut Darmstadt

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In 2010, the Internationales Musikinstitut Darmstadt – IMD [International Music Institute Darmstadt] started an extensive digitisation project of its archive collections that contain relevant sources for music history from the postwar era until today. In addition to preserving the archives through digitisation and indexing, a web database is currently being developed in order to enable scholars all over the world to research the IMD archival collection. The IMD mainly hosts material on the history of the International Summer Course for New Music that has been held in Darmstadt since 1946. From the early years until today the International Summer Course for New Music – or simply: the Darmstadt Summer Course<sup>1</sup> – has been a central point of reference for the technical and aesthetic aspects of composition as well as for the performance practice of contemporary music. It is a summer academy, discourse forum and music festival in one, and comprises a variety of formats including seminars and masterclasses for composers and interpreters, concerts, workshops, lectures and panels (FIGURE 1). The fact that a wide range of artists have visited the Darmstadt Summer Course over the years – some of them key figures of 20<sup>th</sup> century music history – makes its archive one of the central collections for a source-based

historiography of music after 1945. It now documents almost 70 years of discourse on and performance practice in music without any interruption.

FIGURE 1. © IMD Archive



## COLLECTION OVERVIEW

The Darmstadt Summer Course was founded one year after the end of World War II in a severely destroyed city by Wolfgang Steinecke, who was at that time the Darmstadt cultural consultant and Head of the Department of Arts and Culture. Steinecke maintained the artistic responsibility for the Summer Course up to his death in 1961. Further directors have been Ernst Thomas (1962–1981), Friedrich Hommel (1981–1994) and Solf Schaefer (1995–2008). In 2009, Thomas Schäfer became the Artistic Director of both the International Summer Course and the International Music Institute.

The shape of the IMD archive has emerged out of the institution's history and structure: a constant interplay of programme planning, festival and academy administration, performance, discourse, and the documentation and reflection of

the events themselves in audio, photo, video and press reports. Besides these sources that are related to the Darmstadt Summer Course, there is also a stock of administrative documents and correspondence.

The collection can be divided into five archival series:

- I. Text documents;
  - Correspondences since 1946 with composers, interpreters, scholars, ensembles, broadcasting companies etc. (more than 100 binding folders)
  - Summer Course registration forms since 1946 (over 10,000)
  - Administrative documents since 1946: participant lists, calculations, library tickets, food ration cards, contracts etc.
- II. Photos from 1946 until today (more than 20,000);
- III. Audio archive from 1948 until today: recordings of concerts, lectures, panels (over 10,000 titles);
- IV. Press archive;
  - Summer Course Press articles since 1946
  - Press Articles on composers and interpreters
- V. Info material and programmes: composer brochures, festival programs etc.

The directors' correspondences with composers certainly constitute the core of the correspondence archive. Besides discussing practical questions between the IMD and composers who were invited, many of these letters provide insight into course contents, personal networks, the development of ideas in the planning process and topics that had been on the author's mind at that time. However, the IMD correspondence series has to be considered as only one module in a comprehensive archival structure, rather than treated as a separate stock. Since most of the sources refer to concrete events or projects, a network of relations between items belonging to different material types characterises the IMD collection as a whole, such as for example letters referring to a lecture where there is a manuscript or a recording document as well as pictures of that event or a newspaper report. The approach of the IMD's digitisation project therefore involves trying to map out this network of relations between different source types in the database structure. By storing metadata of all of these materials in one database, they can be browsed at once and the list of search results should then provide indications of connections.

From its beginnings in 1946 until today, the Summer Course correspondence has been archived and comprises letters, telegrams and postcards to and from composers, interpreters, broadcasting companies, archives etc. Outgoing letters were usually kept in carbon copies. In cooperation with other archives,

important correspondences have been completed and missing letters substituted by copies. For example, the IMD has exchanged copies of letters with the Archivio Luigi Nono, the Paul Sacher Stiftung and the Akademie der Künste.

Since 1947, the Summer Course was continuously documented in photographs and in 1948 audio documentation started with concerts and later was expanded to include live recordings of lectures and panels, and also to a very small extent to video documentation. Furthermore, in its function as a music information centre for Western Germany, the IMD also collected press articles on composers and interpreters from the 1940s until the 1970s as well as info brochures and composer work lists, festival program books and information on musical life in Germany and abroad. Finally, the IMD conserves a library which includes around 35,000 scores, mostly of music that was played in Darmstadt, over 5,000 books on contemporary music and related topics as well as magazines, CDs and records. While the library stock is completely catalogued – after the year 2000 the library card index had been substituted little by little by an electronic database – there was no archive inventory available before the start of the digitisation project.

## LETTERS

In 1948, when the third edition of the Darmstadt Summer Course took place, Wolfgang Steinecke founded the IMD in order to establish an institutional framework for the Summer Course. Being a part of the City of Darmstadt's administration, the institute was and still is obliged to keep correspondence and documents that are related to its activities for a certain time. It would be worthwhile to explore the growing awareness of the value of the documents as precious archival material. Given the fact that the composer correspondences were part of the Summer Course organisation and administration, they were for many years filed in Leitz ring binders in a typical office storage system according to their daily use. Letters of different correspondents on certain Summer Course projects were stored together in one project folder.

This filing principle was changed, probably in the late 1980s or early 1990s, and the historic letters from the eras of the IMD directors Wolfgang Steinecke (1946–1961) and Ernst Thomas (1962–1981) were rearranged according to archival criteria: they were first sorted alphabetically by the names of correspondents or institutions – the incoming letters as well as the carbon copies of outgoing correspondence – and on a second level they were brought into a

chronological order. This reordering process was certainly a result of the increasing number of research inquiries at the IMD in the context of source-based research on twenty-century composers and the awakening interest in the Darmstadt Summer Course's history as a field of musicological research.<sup>2</sup> So there is a close link between scientific demands and the formation of archival structures in this case. Without any doubt, the new filing provided a better overview of the correspondence collection and made it more accessible. However, this archival ordering came with the disadvantage of dissolving connections between letters of different correspondents dealing with the same topics and Summer Course events. Now, in the digital era, some of these connections can be reconstructed with the help of a database and by this means the former project folders can reappear in virtual form.

## ARCHIVE DIGITISATION. TOWARDS A COMPREHENSIVE WEB DATABASE

The IMD started thinking about digitisation as early as in 1997 and carried out the first a large-scale project in cooperation with the Deutsches Rundfunkarchiv [German Broadcasting Archive], at the time based in Frankfurt am Main and Potsdam-Babelsberg. The tape recordings from the years 1948 to 1978, a precious part of the collection, were digitised, preserved, and described. These files and metadata have now been implemented into the new comprehensive digital collection and a database that has been developed since 2010.

After preserving the old magnetic tapes, the next urgent task was to save the correspondence archive, parts of which – especially carbon copies of outgoing letters by Wolfgang Steinecke – were starting to fade. For the reasons mentioned above, a comprehensive approach to digitising the archive seemed the ideal solution and could be realised in 2010 with the help of a four-year support by Kulturfonds Frankfurt RheinMain and subsequent funding by the Hessische Kulturstiftung [Hessian fund for the Arts] that started in 2014.

The aim of the ongoing archive digitisation is to preserve, scan and record the collection – that is, in a first step the complete correspondence until 1992, the Summer Course application forms, the complete photo archive and the sound archive until 1992 – then to describe it according to archival criteria and make the data accessible for online research. None of the current archive database systems was able to integrate metadata for all the different source types (text documents, photos, audio), to provide different views and export functions of

the digital items and an audio player. To map the archive's network structure, a new comprehensive database concept was developed for the IMD's needs by Jürgen Enge and his teams at the University of Applied Sciences and Arts in Hildesheim and formerly at the Karlsruhe University of Arts and Design. During the process, the developers faced two main challenges. First of all they had to find a metadata model that was able to represent all the heterogeneous sources of the IMD archive in their respective special recording criteria. A second challenge was the implementation of data from a database with a completely different architecture. As the German Broadcasting Archive (DRA) had digitised and described the IMD audio series, the sound files and metadata had to be exported from the DRA database and integrated in the IMD database. Thus software development and digitisation – audio documents at DRA, photos and text documents on place at the IMD – happened at the same time. In a first step, specialised database prototypes were developed: audio database, text archive and photo database. Then, these individual database components were combined to enable a comprehensive web research.

The database system uses open source technology, is based on the scripting language PHP and offers a web interface to manage and access content. Metadata can be entered from every computer available with network access by using an ordinary Internet browser like Firefox, Safari, or Internet Explorer. The metadata are saved in relational tables in a MySQL database and can be exported via XML. Full-text search is enabled by the open source search technology Solr. In the backend there are special forms for all source types such as correspondence, other texts and documents, photos, audio, but certain fields are related through indices, including persons, institutions, ensembles, locations, or events (i.e. the respective Summer Course year or a certain concert). Every new term is added automatically to the index of that field and the indices are used for linking different contents with each other.

## EXAMPLE

As for the correspondence that has been digitised so far, every letter has been recorded and described separately (FIGURE 2). A high-resolution digital facsimile is linked to metadata with the common description criteria for letters such as date, location, sender and recipient, content keywords, mentioned persons, as well as special fields including mentioned musical works, references to a certain Summer Course year or event or references to another document. During a later

FIGURE 2. IMD archive database, detail view with metadata of a letter by Luigi Nono to Wolfgang Steinecke (12 August 1958)

**Korrespondenz - Aktuelle Version** Zurück zur Suche Bearbeiten Versionen Export

**Ansicht**

**Signatur** IMD-A100038-200788-19

**Titel** Brief von [Nono, Luigi] an [Steinecke], Wolfgang (1958-08-12)

**Werktitel** Luigi Nono, "Leben und Komposition"; ders., "Das Leben in der Komposition"; ders., "Das Leben der Komposition" (Vortragsvorschläge)

**Gattung** Brief

**Briefdatum** 1958-08-12

**Absender** [Nono, Luigi]

**Empfänger** [Steinecke], Wolfgang

**Event** Ferienkurse 1958

**Sache** Vortrag, Terminabsprache; Programmsprache; Dozentur

**Person** Stückenschmidt, [Hans Heinz]; Thone, [Antonio]; Cage, [John]; [Nono], Nuri; Heilbenbüttel, [Helmut]; Nilsson, [Bo]; Porena, [Boris]; [Maderna], Bruno; Tudor, [David]; Andersch, [Alfred]; Kelemen, [Milko]

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**Bearbeiter** id

**Mediendatei vorhanden** Ja

**Veröffentlichen der Mediendateien** Nein

**Veröffentlichen der Metadaten** Ja

FIGURE 3. IMD archive database, list of search results

**maderna nono 1958** Erweiterte Suche

**Suche eingrenzen:** Alle Bereiche Texte Notizen Korrespondenzen Fotografien Audio-Aufnahmen

**Status** Suchergebnis: 97 Datensätze Sortieren nach: Relevanz Ansicht: Liste Ergebnisse pro Seite: 25

**Editor**

**Event**

- Ferienkurse 1958 (75)
- A Kompositionen-Studio unter der Leitung von Bruno Maderna und Luigi Nono - Workshop/Studio zu den 12 Jahresjubiläen Ferienkursen für Neue Musik - 1958 (14)
- Ferienkurse 1958 (5)
- Musik der jungen Generation (5)
- Ferienkurse 1957 (4)
- Musik der Zeit (3)
- Tage für Neue Musik (3)
- Domäne Hupfeld Paris (1)
- Ferienkurse (1)
- George Enescu Wettbewerb (1)
- Konkretistischer Musikwettbewerb (1)
- Tage für Neue Musik Darmstadt (1)
- Tage für Neue Musik des Hessischen Rundfunks - Veranstaltung zu den 4. Internationalen Ferienkursen für Neue Musik - 1958 (1)
- Warschauer Herbst (1)
- Woodstock Festival (1)

**Person**

- Maderna, Bruno (77)
- Hans, Luigi (67)
- Boulez, Pierre (26)
- Boris, Luciano (13)
- Blochbauer, Karlheinz (12)
- Nilsson, Bo (11)
- Hessner, Anton (10)
- Gazzaroni, Severino (9)
- Kroneg, Egert (9)
- Tibone, Antonio (9)
- Schönberg, Arnold (7)
- Tudor, David (7)
- Dalstein, Luigi (6)
- Davy, Gloria (6)
- Heinic, Rudolf (6)
- Picouret, Henri (5)
- Heinic, Hans (5)
- Stückenschmidt, Hans Heinz (6)
- Amis, Gilbert (3)
- Kolman, Milko (3)
- Kortmeyer (3)
- Porena, Boris (3)
- Vanba, Edgar (3)
- Blochbauer, André (4)
- Cage, John (4)

**Ort**

- Darmstadt, Schloss Hellingberg (14)
- Venedig (7) (10)
- Heilbad (7) (4)

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**Brief von [Nono, Luigi] an [Steinecke], Wolfgang (1958-04-01)**  
 Signatur: IMD-A100038-200788-09  
 Datum: 1958-04-01  
 Bearbeiter: id Erstellt: 2012-01-23 - 14:45:10 Bearbeitet: 2015-03-16 - 22:49:38

**Einleitende Vorträge zum Kompositions-Studio**  
 Signatur: IMD-H-6576  
 Datum: 1958-09-10  
 Bearbeiter: n/a Erstellt: 2015-03-14 - 14:30:15 Bearbeitet: 2015-03-14 - 14:30:15

**Brief von [Steinecke], Wolfgang an [Nono, Luigi] (1958-03-17)**  
 Signatur: IMD-A100038-200789-10  
 Datum: 1958-03-17  
 Bearbeiter: id Erstellt: 2012-01-23 - 14:54:01 Bearbeitet: 2015-03-16 - 22:49:41

**Brief von Maderna, Bruno an Steinecke, Wolfgang (1958-08-19)**  
 Signatur: IMD-A100033-200687-06  
 Datum: 1958-08-19  
 Bearbeiter: id Erstellt: 2012-05-08 - 15:08:07 Bearbeitet: 2015-03-16 - 22:46:44

**Brief von [Nono, Luigi] an [Steinecke], Wolfgang (1958-08-12)**  
 Signatur: IMD-A100038-200788-19  
 Datum: 1958-08-12  
 Bearbeiter: id Erstellt: 2012-01-20 - 11:57:30 Bearbeitet: 2015-03-16 - 22:49:26

**Brief von Steinecke, Wolfgang an Nono, Luigi (1958-06-09)**  
 Signatur: IMD-A100038-200788-20  
 Datum: 1958-06-09  
 Bearbeiter: id Erstellt: 2012-01-20 - 12:01:14 Bearbeitet: 2015-03-16 - 22:49:09

**Brief von [Nono, Luigi] an [Steinecke], Wolfgang (1958-02-03)**



phase, OCR information will be provided for the typewritten or printed text sources.

Especially the connections between different sources are assumed to be of high interest for research (FIGURE 3). In the example, an overall full-text search for ‘Maderna’ and ‘Nono’ and ‘1958’ shows in the list of results an audio file of the ‘Kompositions-Studio’ they held in 1958, the correspondence of IMD director Wolfgang Steinecke with Nono and Maderna on that topic, registration forms of workshop participants, audio documents of the pieces played in the workshop and other related documents. In the left bar, additional filtering options are suggested for a multifaceted search with the help of the indices (events, persons, institutions, ensembles, locations, matters etc.).

In the detailed view of the audio entry the file can be played directly in the browser,<sup>3</sup> while the metadata provide precise information on duration, date and location of the recording, author, speakers, musicians and related people as well as on sections of the audio file (FIGURE 4).

FIGURE 4. IMD archive database, detail with metadata of an audio document

The screenshot shows a web browser window displaying the details of an audio recording in the IMD archive. The browser address bar shows the URL: `imd.muehlschlegel.info/admin/detail/IMD-M-6576/maderna+nono&audioTransmission&p=1&x=25&l=lst&(score)=desc`. The page title is "Audio-Aufnahme - Aktuelle Version".

At the top, there is a waveform player with a duration of 19:48. Below the player, the following metadata is displayed:

- Signatur:** IMD-M-6576
- B-Nummer:** B06461645
- Titel:** Einzelnde Vorträge zum Kompositions-Studio
- Veranstaltung:** 1. Kompositions-Studio unter der Leitung von Bruno Maderna und Luigi Nono - Veranstaltung zu den 13. Internationalen Ferienkursen für Neue Musik - 1958;
- Aufnahmedatum:** 1958-09-10
- Ort:** Darmstadt, Schloß Heiligenberg
- Deskriptor:** Ferienkurse für Neue Musik; IMD; Nono, Luigi; Maderna, Bruno; Lampenberger, Gerhard
- Bemerkung allgemein:** Originalnummern: K12, K42, K43, K44, K45, K46, K47, K48, K49, K50, K51, K52, K53, K54, K55, K56, K57, K58, K59, K60, K61, K62, K63, K64, K65, K66, K67, K68, K69, K70, K71, K72, K73, K74, K75, K76, K77, K78, K79, K80, K81, K82, K83, K84, K85, K86, K87, K88, K89, K90, K91, K92, K93, K94, K95, K96, K97, K98, K99, K100. (Das zweite Band enthält eine Kopie des Vortrages von Luigi Nono und eine Kopie der Sätze 2 und 3 aus Anton Weberns 5. Sätze; siehe B009463767)
- Trichterungsnummer:** DRA-IMD-12333/59
- Bemerkung Publikation:** IMD IX, 1958
- Bemerkung allgemein:** Erster Programmpunkt der Veranstaltung
- Bemerkung Aufnahme:** 13. Internationale Ferienkurse für Neue Musik, Darmstadt 1958
- Dauer:** 12:48
- Betriebsart:** Mono
- Bereich:** Wort
- Entstehungsart:** Eigenproduktion
- Mitwirkende:**

Nono, Luigi	Redner
Maderna, Bruno	Redner
- Segmente:**
  - Vortrag Luigi Nono
  - Vortrag Bruno Maderna
  - Gespräch zwischen Maderna und dem jungen Komponisten Lampenberger
  - Trio für Violine, Klarinette und Trommel: Anfang der Probe
- Kompilation/en:**
  - Kompositions-Studio unter der Leitung von Bruno Maderna und Luigi Nono - Veranstaltung zu den 13. Internationalen Ferienkursen für Neue Musik - 1958



## ACCESS TO METADATA AND SOURCES

As a public collection, the physical IMD archive is accessible in the reading room to everybody, with advance notice due to limited space.<sup>4</sup> Every quotation from the IMD correspondence that is used, either in a published text or in an unpublished university thesis, has to be authorised in advance by the IMD and if necessary by the author or his legal successor as well.

The full digital collection is already accessible locally in the IMD archive and a public version of the database will be published online in the course of the year 2015 when the test phase and the transfer to the final web server will be completed. For long-term storage of data and metadata the IMD will collaborate with Darmstadt Technical University and its library.

Since the IMD hosts rather young archive material, from 1946 until today, most of the items are protected by German copyright and in some cases personality right restrictions apply. Hence, most of the digital collections will only be fully accessible in the reading room where the user will have access to audio files and high resolution images of text documents and photographs.

Through the online research tool the public all over the world will be able to access all metadata and use the database as an extended inventory to get an overview on the holding, to better plan a visit in the archive or to carry out precise research inquiries.

## VALORISATION AND DISSEMINATION

It is clear that the development of new archival research instruments follows the archives' experiences with current and past research inquiries, but also faces to a certain extent the challenge of anticipating future scientific demands. The task therefore is to spread the word on the new tools and to encourage users to work with them, test them and give feedback that is important for further development.

The IMD archive already is much frequented by scholars, musicians, master and PhD students and journalists from around the world and the composer correspondence is used as source material in a great number of publications.<sup>5</sup> Recent studies include the biographic approach to Wolfgang Steinecke by Michael Custodis in 2010<sup>6</sup> or Martin Iddon's exploration of the early Darmstadt years through a wealth of primary sources: *New Music at Darmstadt. Nono, Stockhausen, Cage, and Boulez*<sup>7</sup>. Only a few correspondences, however, have been

published so far as a whole, such as the letters by Karlheinz Stockhausen,<sup>8</sup> Mauricio Kagel<sup>9</sup> and Nam June Paik.<sup>10</sup>

The letters also provide background information concerning other source types, for example in the edition of Theodor W. Adorno's Darmstadt lectures (*Kranichsteiner Vorlesungen*) from the IMD sound archive. The audio documents were transcribed and published as a separate volume in the series of Adorno's collected writings and a variety of letters were cited in the annotations.<sup>11</sup> With all the digital sound material available at the IMD, the Hessischer Rundfunk [Hessian Broadcasting Service] started a series of radio stories on the history of the Darmstadt Summer Course in 2011. 75 radio features have been broadcast until today, and will be followed by another series with 25 parts in 2015–2016.

The IMD has also begun to disseminate archive recordings through a CD series together with the label NEOS MUSIC. Important sound documents like John Cage's Darmstadt lecture from 1958 have been made accessible and will be followed by other editions.<sup>12</sup> Furthermore, items from the IMD collections are often on loan for exhibitions. But still, the scientific valorisation of the IMD sources is aimed at being expanded in the coming years. Now, that a huge amount of sources has been described and made accessible, the ground is prepared for a deeper analysis of the material.

The start of the digitisation project was followed by two extensive research projects on the history of the Darmstadt Summer Course, both using the IMD archive collections: while the Berlin based project 'Ereignis Darmstadt' (Berlin University of the Arts, Direction: Dörte Schmidt and Pietro Cavallotti, started in 2011) understands the Summer Course as aesthetic, theoretical, and political sphere of action, the Basel project 'Focus Darmstadt' (University of Music Basel, Direction: Michael Kunkel, started in 2013) uses the different archival sources at the IMD for selected case studies on the performance practice of contemporary music.

## PERSPECTIVES

The IMD is currently continuing with audio digitisation in order to make the collection complete from 1992 until today. Further projects include the description and digitisation of the correspondence after 1980 and the press archive, but for their realisation it will be necessary to raise extra funding.

Since the IMD holds a ‘living archive’ that is always in process, one of the next tasks will be to establish a workflow for the integration of the new material that the IMD is collecting with every new Summer Course edition, and this is where questions on the preservation of electronic mail are coming into account. In the long term the aim is to establish a broad research network that includes various universities, music academies, archives and research institutions to widen the scope of contemporary music research and to share and disseminate knowledge on the music related to the IMD archive.

Many thanks to my colleagues from the IMD archive team, especially Jürgen Krebber and Susanne Döring, for supporting me with this article.

FIGURE 5. © IMD Archive



## Notes

- 1 Official titles: Ferienkurse für internationale neue Musik (1946–1947), Internationale Ferienkurse für neue Musik (1948–1949), Internationale Ferienkurse für Neue Musik (since 1950). Unofficial titles: Kranichsteiner Ferienkurse, Darmstädter Ferienkurse.
- 2 In 1993, Gianmario Borio and Hermann Danuser initiated the first comprehensive research project on the history of the Darmstadt Summer Course with the support of DFG (Deutsche Forschungsgemeinschaft). The four volumes have become a standard reference: *Im Zenit der Moderne. Die Internationalen Ferienkurse für Neue Musik Darmstadt 1946–1966*, ed. by Gianmario Borio and Hermann Danuser, Freiburg im Breisgau: Rombach, 1997.
- 3 Due to German music copyright legislation, the online audio player is only available for users on location in the archive, not for public use on the web.
- 4 <http://www.internationales-musikinstitut.de/en/archive-library/> [31 March 2015].
- 5 A list of selected research projects at the IMD archive can be found here: <http://www.internationales-musikinstitut.de/en/imd-en/research/> [31 March 2015].
- 6 *Traditionen, Koalitionen, Visionen. Wolfgang Steinecke und die Internationalen Ferienkurse in Darmstadt*, ed. by Michael Custodis, Saarbrücken: Pfau-Verlag, 2010.
- 7 Martin Iddon, *New Music at Darmstadt. Nono, Stockhausen, Cage, and Boulez*, Cambridge: Cambridge University Press, 2013.
- 8 *Karlheinz Stockhausen bei den Internationalen Ferienkursen für Neue Musik in Darmstadt 1951-1996. Dokumente und Briefe*, ed. by Imke Misch and Markus Bandur, Kürten: Stockhausen-Verlag, 2001.
- 9 *Mauricio Kagel bei den Internationalen Ferienkursen für Neue Musik in Darmstadt*, ed. by Björn Heile and Martin Iddon, Hofheim: Wolke Verlag, 2009.
- 10 “Ich schreibe Amusik”. Der Briefwechsel Nam June Paik – Wolfgang Steinecke 1957–1961’, in: *Darmstadt-Dokumente I*, ed. by Heinz-Klaus Metzger and Rainer Riehn, München: edition text + kritik (Musik-Konzepte Sonderband), 1999, pp. 110–133.
- 11 Theodor W. Adorno, *Kranichsteiner Vorlesungen*, ed. by Klaus Reichert et al., Berlin: Suhrkamp Verlag (Theodor W. Adorno, *Nachgelassene Schriften*, Abteilung IV: Vorlesungen, Bd. 17), 2014.
- 12 *Darmstadt Aural Documents. Box 2. John Cage. Communication* (CD), Neos Music, NEOS 11213, 2012. See also *Darmstadt Aural Documents. Box 1. Composers – Conductors* (6 CDs), Neos Music, NEOS 11060, 2010.