From Prop to Producer:

The Appropriation of Radio Technology in Opera during the Weimar Republic

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Abstract

This thesis explores the appropriation of radio technology in opera composed during the Weimar Republic. It identifies a gap in current research where opera and radio have often been examined separately in the fields of musicology and media history. This research adopts a case study approach and combines the disciplines of musicology and media history, in order to create a narrative of the use of radio as a compositional tool in Weimar opera. The journey begins with radio as a prop on stage in Ernst Krenek's *Jonny speilt auf* (1927) and ends with the radio as a producer in Walter Goehr's radio opera *Malpopita* (1931). Max Brand's *Maschinist Hopkins* (1929) provides an interlude between these two works, where its analysis serves to pinpoint compositional techniques used in radio opera. The opera case studies reflect the changing attitudes towards technology and media in Weimar musicology, as shown in the journal, *Musikblätter des Anbruch* (1919-1937). The purpose of this research is to view opera through a lens of media history and in doing so it considers debates on entanglements within media history. The appropriation of radio in Weimar opera shattered the borders of traditional performance practice, resulting in the merging of these two media. The analysis explores the materiality of the radio as a prop on the stage and subsequently the lack of materiality within radio opera, by exploring the application of the so-called 'invisible voice' in order to compensate for the lack of visual stimuli. This thesis will show radio's journey from prop to producer in Weimar opera performance, mirroring the changing attitude towards radio within Weimar musicology. It will offer new perspectives on existing analyses by placing *Jonny spielt auf* and *Maschinist Hopkins* within the context of media history, and it will offer the first academic examination of Goehr's *Malpopita,* contributing to the narratives of both opera and radio history.

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Introduction

> So long as opera fell primarily within the domain of musicology, it was studied first and foremost as music alone.
>
> *Linda Hutcheon*[1]

In February 1986 BBC Radio 3 aired a series of concerts devoted to the Weimar era. The series spanned over nine days and consisted of a collection of opera, music and drama. The *Radio Times* printed a corresponding article, written by Callum MacDonald, with the opening: 'Goodbye to fantasies of Berlin and Hello to the real sounds of the Weimar Republic.'[2] The series comprised operatic works, which included Brecht and Weill's *Mahagonny* (1930) Ernst Krenek's *Jonny spielt auf* (1927), and Max Brand's *Maschinist Hopkins* (1929). In his justification of the choices of repertoire for the series MacDonald writes:

> Over nine days, this week and next, Radio 3's Weimar Season sets out to give some ideas of what it really felt like at the time, in a series that rejects history's selectivity and tries to reflect a variety of theatrical and musical experience on offer – the modish, the ephemeral, the unjustly forgotten as well as the insistently (but usually imperfectly) remembered.[3]

This suggests that the aim of this series was to provide an audio montage that unmasked the stereotypical memory of Weimar culture, by broadcasting on British radio what the BBC considered a true representation of Weimar music. It is true that Krenek's *Jonny spielt auf* is one of the most remembered operas from the Weimar Republic and Brand's *Maschinist Hopkins* is not as well known, yet neglects Walter Goehr's radio opera *Malpopita* (1931), which remained unperformed since its 1931 premier until its revival by the *Berliner Komische Oper* in 2004. This series poses the question about the choice of repertoire, the influence of nostalgia, authenticity and the experience of these operas through British radio as opposed to the German stage, which provides the starting point for this thesis, which will explore the relationship between opera and radio during the Weimar Republic. Unlike BBC Radio 3 however, it is not concerned with reproduction of opera on the radio during the Weimar Republic, but the evolution of radio as a

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[1]Linda Hutcheon, 'Interdisciplinary Opera Studies,' *International Review of the Aesthetics and Sociology of Music*, vol.121, no.3, (May 2006): 802-810, 802, JSTOR.
[2] Callumn MacDonald, 'Goodbye to Fantasies of Berlin,' *Radio Times*, (8-14 February 1986): 23.
[3] Ibid.

compositional tool during the 1920s and early 1930s, resulting in new perspectives on existing studies regarding Krenek's *Jonny* and Brand's *Hopkins,* and offering analysis of the previously unstudied radio opera, Goehr's *Malpoptita,* a paramount example of German experimental radio.

The 1986 revival of Weimar music on BBC Radio 3 shows that fragments of Weimar culture still echo through the twentieth and twenty-first centuries.[4] Academics from various disciplines have been attracted to Weimar culture and opera is no exception. For example, the creation of the *Zeitoper* (opera of the time) by Weimar composers has indeed attracted the attention of musicologists. The *Zeitoper,* as Kurt Weill described, reached a new level of representing the world, not as a photograph, but as a concave or convex mirror which is proportionate to reality. He noted that opera was adapting to represent the changing man and his reactions to external influences, which included technology and media.[5] These external influences suggest that opera was becoming intertwined with other aspects of the republic. These included the jazz scene, cabaret, modernism, Americanisms, and the new medium of radio. Musicologists have explored many of these influences but seem to mostly neglect the appropriation of radio in Weimar opera.[6] This thesis attempts to enhance current research by combing the disciplines of musicology and media history in order to present a narrative of the use of radio as a compositional tool within Weimar opera in terms of theory and practice. As the next chapter will show, Weimar opera and early German radio have so far been studied firmly within their respective fields of musicology and media history. Yet radio was present on the Weimar stage, revolutionising the traditional performance practice of opera. Likewise opera played a key part in early radio programming in Germany, including works written specifically for radio in mind. Before I proceed, however, it is important to note the

[4] Other examples of appropriation of Weimar culture inclue: 'Mack the Knife' from Brecht and Weill's *Die Dreigroschenoper* (such as a McDonald's advertising campaign from the 1980s and Robbie William's cover from his album *Swing when you're winning* released in 2001), and Bob Fosse's film *Cabaret* (1972).

[5] Kurt Weill, ‚Zeitoper,' *Melos 7,* (March 1928): 106-108. Translation by Anton Kaes available in: *Weimar Republic Sourcebook*, Martin Jay, Anton Kaes, and Edward Dimendberg, ed., (Berkeley: University of California Press 1994), 573.

[6] An in-depth analysis of these studies can be seen in chapter 1. For example see: Cook, *Opera for a New Republic: The Zeitopern of Krenek, Weill and Hindemith*, (Rochester: University of Rochester Press, 2010), (Originally published in 1988 by UMI Research Press); David Drew, 'Musical Theatre in the Weimar Republic,' *Proceedings of the Royal Musical Association 88th Session,* (1961-1962), 89-108, 90, JSTOR; and Frank Mehring, 'Welcome to the Machine! The Representation of Technology in *Zeitopern,' Cambridge Opera Journal,* Vol.11, No.2 (July 1999): 159-177, 159, JSTOR.

unique medium that is opera and why it is beneficial to employ interdisciplinary methods in its analysis.

OPERA AS MULTIMEDIA

Opera is a longstanding, traditional medium of entertainment, which throughout history has been forced to adapt to an ever changing social arena. It has staged politics and revolutions, and is by no means a purely musical artefact. As Linda Hutcheon has pointed out, opera is a complex multimedia art form, with multi-mediated dimensions and thus no single analytical approach will do it justice.[7] The opening quote by Linda Hutcheon suggests that opera's primary form is musical, and previous studies have remained firmly within the field of musicology. Yet approaches to opera research are gradually expanding in modern musicology, as developments within the field begin to view opera as an interdisciplinary artefact. Interdisciplinary opera studies thus far have included opera and film, philosophy, sociology, history, politics, economics and culture.[8] This suggests that it is beneficial for opera studies to cross the boundary of musicology, enabling varying perspectives on the position of opera within a historical period. Furthermore, Hutcheon argues that opera is to be considered as multimedia with multimediated dimensions.[9] This refers to opera's entangled components. For example its performance includes music, poetry, dance, scenery, stage processes, programmes, dialogue, costumes, and in more recent times, film projections. In short, opera is not a purely musical artefact and should not be treated as such. Lawrence Kramer also emphasises opera's multimedia properties, drawing attention to the nature of opera and its complex aesthetic:

> Opera is no longer art, exactly, it is a heterogeneous patchwork of media contributions, no one of which has automatic priority in shaping either aesthetic value or cultural meaning.[10]

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[7]Linda Hutcheon, 'Interdisciplinary Opera Studies,' *International Review of the Aesthetics and Sociology of Music*, vol.121, no.3, (May 2006): 802-810, JSTOR.

[8] See: Jeongwon Joe, *Opera as Soundtrack,* (London: Routeledge, 2013); Jeongwon Joe & Rose Theresa, *Between Opera and Cinema,* (New York: Psychology Press, 2002); Peter Kivy, *Osmin's Rage: Osmin's Rage: Philosophical Reflections on Opera, Drama and Text,* (London: Cornell University Press, 1988); Herbert Lindenberger, *Opera in History: From Monteverdi to Cage,* (Stanford: Stanford University Press, 1998); Mark Darlow, *Staging the French Revolution: Cultural Politics and the Paris Opéra 1789-1794,* (Oxford: Oxford University Press, 2012); Anastasia Belina Johnson Eds., *The Business of Opera,* (Farnham, Surrey: Ashgate 2015); Jeremy Tambling, *Opera and the Culture of Fascism,* (Oxford: Clarendon Press 1996).

[9] Hutcheon, 'Interdisciplinary Opera Studies,' 802.

[10] Lawrence Kramer, *Opera and Modern Culture: Wager and Strauss,* (Berkeley: University of California Press, 2004), 26.

This patchwork of media contributions, all equal in their authority, suggests the complex nature of opera and its construction. Viewing opera as media, or even multimedia, means that its analysis can contribute to media history as well as musicology. So far, studies concerning radio and opera concentrate on radio programming, the use of radio to distribute the opera classics, and what role opera played within radio.[11] In contrast, this thesis aims to understand the role of radio in opera during the Weimar Republic, whether it is used as a prop on the stage or to fully produce the opera (radio opera). Therefore, when radio is considered as more than a means of dissemination, but rather as a compositional tool for opera, it becomes of interest to both music and media historians, where the analysis of radio's role within opera contributes an interesting discussion to media history scholarship.

Opera has a vast history and thus can be regarded as a long standing traditional form of entertainment. It initially developed in early 16th century Italy, where it was a central part of Venetian carnivals. During the 17th century, opera took inspiration from Greek tragedy and sacred music as shown in Monteverdi's *L'Orfeo* (1607), where the concept of recitative was first developed and the presence of ornamentation punctuates the drama.[12] As opera spread through Europe, it developed several genres, including, *Opera Seria*, *Opera Buffa*, *Opéra Comique* and *Operetta*. The development of opera has often been strongly connected with patronage, high art, and revolution. For example, the fall of the monarchy in France in 1792 meant that the ownership of opera was transferred from the crown to the state, and operatic output was subject to censorship and strong political uprising. Where Gluck's grand tragedies of the 1770s were defining of the *ancien régime*, composers of the French Revolution were free from theatrical privilege (a tool of political exchange between state and the public, and a form of financial control exerted by the crown and government), allowing a state owned theatre, yet this made the career of an opera composer rather difficult due to censorship and a politically fragile arena, which is reflected in the careers of Méhul and Grétry.[13]

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[11] For example see: Paul Jackson, *Saturday Afternoon at the Old Met: The Metropolitan Opera Broadcasts, 1931-1950,* (Hong Kong: Amadeus Press, 1992): Timothy D. Taylor, 'The Role of Opera and the Rise of Radio in the United States,' in Christina L. Baade, James A. Deaville ed., *Music and the Broadcast Experience: Performance, Production and Audience,* (Oxford: Oxford University Press, 2016), 69-87;.

[12] George J. Buelow, *History of Baroque Music,* (Indiana University Press: 2004); Paolo Fabri, *Monteverdi,* (Cambridge University Press: 2007); John Whenham, *Claudio Moteverdi: Orfeo,* (Cambridge University Press: 1986).

[13] See: David Charlton, 'Motive and Motif: Méhul before 1791,' *French Opera 1730-1830: Meaning and Media,* (Ashgate Variorum 2000); M. E. C. Bartlet, *Etienne-Nicolas Méhul and Opera: Source and*

The 19th century gave birth to the romantic opera. In early romantic opera the emphasis on soaring and virtuosic vocal lines paved the way for opera celebrities, which is mirrored in the operas of Verdi and Meyerbeer. In Germany, Richard Wagner was developing a new genre of opera, an opera on an epic scale, and musical dramas with a focus on the total art form (*Gesamtkunstwerk*), where the orchestra became just as important as the singers. He omitted separate numbers in favour of continuous melody and developed the idea of *leitmotif*, a short melodic idea which represents key elements (such as characters, objects, and emotion).[14] As Krisztina Lajosi states, Wagner's theory about society and art influences the thought of media shaping man.[15] Lajosi also notes Wagner's recognition of theatre as media, and its importance in society.[16] This is a direct parallel to Hutcheon's view of opera as media and is perhaps one of the reasons why Wagner was intent on creating opera that shaped society, where the whole story was grounded in German history and culture. The theatre and opera house, according to Wagner, were forms of media, where the *Gesamtkunstwerk* was the act of mediation. According to Wagner, the goal of art is to create a spiritual community, where its actions are characterised by the unity of the will, and media is an effective tool for this, which is why Lajosi venerates Wagner as the forerunner of modern media theorists.[17] Wagner's idea of *Gesamtkunstwerk* highlights the discussions of the consideration of the total work of art in the analysis of the operas. The thesis questions the relationship between the music and drama influenced by the introduction of radio, either as a representation or a means of production.

Wagner's techniques went on to influence film composers of the 20th century, where the *leitmotif* is often used to indicate a character on screen, or sometimes hidden from sight, for example the iconic theme from *Jaws* (1975) indicates to the audience that

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Archival Studies of Lyric Theatre during the French Revolution, Consulate and Empire, (Musik – Edition Luice Gallard 1999); Winton Dean, 'Opera under the French Revolution,' *Proceedings of the Royal Musical Association* (94th Session 1967-1968), 77-95 JSTOR; F.W.J. Hemmings, *Theatre and State in France 1760-1905,* (University of Cambridge Press 1994); Michael McClellan, *Battling over the Lyric Muse: Expressions of Revolution and Counter Revolution at the Theatre Feydeau 1789-1801* (University of North Carolina, EMI Dissertation Services 1994).

[14] See: Patrick Carnegy, *Wagner and the Art of Theatre,* (Yale University Press: 2005); Thomas S Grey, *Richard Wagner and his World,* (Princeton University Press: 2007); Matthew Bribitzer-Stull, Alex Lubet and Gottfried Wagner ed., *Richard Wagner for the New Millennium: Essays in Music and Culture,* (Palgrave MacMillan: New York, 2007).

[15] Krisztina Lajosi, 'Wagner and the (Re)mediation of Art: Gesamtkunstwerk and Nineteenth-Century theories of Media,' *Journal of Literature Studies,* (November 2014), 42-60, http://www.tijdschriftframe.nl/23-2-literatuur-en-muziek/krisztina-lajosi-wagner-and-the-remediation-of-art-gesamtkunstwerk-and-nineteenth-century-theories-of-media/.

[16] Ibid, 49.

[17] Ibid, 58.

the shark is present, yet they cannot see it. Wagner's nationalist revolutionary ideas and the influence of Schopenhauer are present in both his operas and philosophy essays, which included *Judaism in Music, Music of the Future,* and *Art and Revolution*.[18] These ideas were rejected by composers of the Weimar Republic, but were revised by the National Socialists in the 1930s. During the 20th Century, composers attempted to bring opera up to date by applying techniques of modernism, such as Expressionism, *Neue Sachlichkeit, Minimalism,* atonality, bitonality and *Serialism*, yet traditional opera techniques such as *Aria, Recitative,* duets, trios, overtures and *Leitmotif* remained at the heart of its composition. Composers developed new performance techniques, for example Arnold Schoenberg introduced a new style of vocal delivery, *Sprechstimme,* where the singer is instructed to half sing and half speak the words. Plots of modernist operas were generally in a modern setting, with exaggerated portrayals of war, poverty and psychological trauma.[19] Additionally, modern objects found their way on stage. These were used as props, but also became part of the music itself (for example typewriters, gramophones, telephones), which can be seen in the *Zeitoper* of the Weimar Republic.

Opera throughout history then, has certainly revealed itself as more than a work of art, but its dimensions are complex and entangled with the society in which it was composed. As Daniel Snowman writes: 'But in addition to being an art form, opera has always been a social, economic and political phenomenon, elements of each lie between the lines of that indignant letter.'[20] The social and political climate of the Weimar Republic was paramount to artistic output, where political satire was reflected in *Zeitoper* and the anxieties of the great depression could be seen in the epic operas of Brecht and Weill. Snowman also notes that the 'liveness' of opera is what makes it exciting, not to mention the elitist connotations associated with the art form, both in history and today:

> The appropriate dress code, the price of a ticket, the behaviour of fellow audience members, the supposed omni-competence of a beleaguered manager, the threat of legal action – all are part of the story.[21]

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[18] Richard Wagner, *Judaism in Music and other Essays,* Translated by W. Ashton Ellis, (Nebraska: University of Nebraska Press: 1995); Richard Wagner, *Art and Politics,* Translated by W. Ashton Ellis, (Bison Books 1995), (Originally published in English in London 1895).
[19] See: Richard Begham and Matthew Wilson Smith eds., *Modernism and Opera,* (JHU Press: 2016); Mervyn Cooke eds, *The Cambridge Companion to Twentieth Century Opera,* (Cambridge University Press: Cambridge, 2005); Sandra Corse, *Operatic Subjects: The Evolution of the Self in Modern Opera,* (Fairleigh Dickinson University Press: 2000); Lawrence Kramer, *Opera and Modern Culture: Wager and Strauss,* (Berkeley: University of California Press, 2004).
[20] Daniel Simon, *The Gilded Stage: A Social History of Opera,* (London: Atlantic Books, 2009), 2.
[21] Ibid.

In other words, the experience of opera is not just music, scenery and dialogue, but the atmosphere of the opera house, the thrill of 'liveness' and its political content combine in making it a unique medium of entertainment. The question then is whether these factors are lost or adapted when opera becomes entangled with other media, and in particular, radio.

METHODOLOGY

The core research methods are musicological and textual analysis, concentrating on the following case studies. Firstly the journal *Musikblätter des Anbruch,* a Viennese journal from 1919-1937.[22] The contributors for this journal were a wide range of composers, critics and academics. The journal contained reviews, theoretical essays and debates regarding new media technology. Analysis of this journal provides a fascinating insight into the complex and changing attitudes towards media in Weimar musicology. Additionally, *Anbruch* was an Austrian journal with a variety of Austrian and German contributors; this will therefore provide an excellent example of trans-border relations in Weimar academia, not to mention the interdisciplinary nature of the journal's content. *Anbruch* is written in German, so it is important to note here that, unless stated otherwise, all translations within this thesis are my own, including the articles from this journal and text from music scores. Some articles from *Anbruch* appear as transcripts of lectures or radio talks. It is not often clear as to whether these were the speeches which were read, in which case there is no accounting for ad-libbing, or whether they were transcribed after the event. These transcripts offer a different style of critique to the essays, as when reading a transcript it appears more natural, less refined than a written article, sometimes showing a more fluid perspective on its subject. The significance of this journal is immeasurable, as it continues to influence modern musicology as well as presenting the historian with a narrative of changing attitudes within Weimar musicology, which will become clear in chapter 2.

As opera is a musical art form, musical sources play a significant role within this thesis. The following scores have been analysed: Ernst Krenek's *Jonny spielt auf,* Max Brand's *Machinist Hopkins* and Walter Goehr's *Malpopita.* It is not just the music itself

[22] *Musikblatter des Anbruch Monatsschrift für moderne Musik. Geleitet von Dr. Paul Stefan 1919-1937 Faksimile-Ausgabe Auf CD-ROM,* CD Rom, (Universal Edition, 2001).

which has been examined, but other aspects such as stage directions, scenery description and the libretto, which all contribute to the composition and performance of the work. Shirli Gilbert has argued that music functions as a historical lens as an object *and* activity, where the object is the work itself (i.e. musical text, score), and the activity refers to the performance.[23] The object of the work is intended to be fixed (unless the composer decides to make any revisions) whereas the activity of the music changes. For example, *Jonny spielt auf* was staged in many opera theatres, including those outside of Germany (Prague and Vienna). These had different singers, instrumentalists, set designers and audiences. To understand the musical activity, then, there is a need to engage with wider primary sources alongside the original work, as Leon Botstein writes:

> In historical terms one clearly needs to distinguish between the script or map of music (E.g. a printable text) and the performed occasion, the actual sound journey.[24]

When investigating the relationship between opera and radio broadcasting, the concept of sound journey becomes even more intriguing, as various musical activities represent events, emotions and environments in order to replace the visual elements of traditional opera. The instructions within the scores construct an understanding of how these sound journeys occur. For example, in Krenek's *Jonny*, the detailed descriptions in the score indicate the simulation of a radio broadcast. In Brand's *Maschinist Hopkins* the score presents the invisible voice of the machines, and in Goehr's *Malpopita* the directions construct a sense of sonic space due to the lack of visual scenery. As this thesis explores the role of radio within Weimar opera, the musical scores are examined in detail within the thesis. The scores are all copies of piano reductions of the original works, although some instrumentation is highlighted. All of the scores were accessed through libraries.[25]

Theoretical Approaches

Moving from the case study material to methods informing their analysis, this research explores the appropriation of radio within opera and the changing attitudes within musicology towards the new medium during the Weimar Republic, thus an interdisciplinary approach is essential in order to broaden current musicological

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[23] Shirli Gilbert, 'Music as Historical Source: Social History and Musical Texts,' *International Review of the Aesthetics and Sociology of Music*, vol.36, no.1, (June 2005): 117-134, 127, JSTOR.
[24] Leon Botstein, 'Notes from the Editor: Memory and Nostalgia as Music-Historical Categories,' *The Musical Quarterly*, Vol.84, No.4, (Winter 2000): 531-536, 531, JSTOR.
[25] The score Krenek's *Jonny spielt auf* can be accessed from many university music libraries in the United Kingdom. Brand's *Maschinist Hopkins* is available at the British Library. Goehr's *Malpopita* is currently only available in Bremen.

perspectives on Weimar opera, as well as contribute to the existing narrative in radio history. In addition to musical analysis, this thesis will consider historical approaches within media history. Viewing opera within the context of media history will give a new outlook on the current understanding of Weimar opera, by recognising opera as a traditional medium of entertainment and its entanglement with radio, a new medium during the Weimar Republic.

Before outlining specific approaches to media history in current scholarship, it is important to note the place of critical theory within this research, as it has origins in the Weimar Republic and its theorists such as Walter Benjamin, Theodor Adorno and Siegfried Kracauer were active in Weimar academic circles and journals. The Frankfurt School was founded in the Institute for Social Research at Goethe University Frankfurt by Carl Grünberg. The school was constructed on Marxist principles and aimed to promote interdisciplinary research within the social sciences. Critical theory was concerned with the 'truth value' of art, which according to Held, 'lies in the capacity to sustain a discrepancy between its projected images (concepts) of nature and human kind, and its object's actuality.'[26] The concept of modernity suggests that the value and function of art was changing, and the Frankfurt school aimed to understand these changes and theorise as Hansen states, the struggles of the directions of modernity, the transformation of sensory perception and subjectivity of modernity.[27] In musicology, this relates specifically to the aesthetics of music and how they were evolving with the invention of new technology and media. One of the key voices on these issues during the Weimar Republic was Theodor Adorno, who contributed to *Anbruch*, as well as publishing other critical writings on media and mass culture, and most famously, his collaboration with Max Horkheimer in *The Dialectic of Enlightenment* (1944), which will be of significance in the analysis of Goehr's *Malpopita*, as the *Funkoper* portrays a critique of capitalism and culture industry. As a sociologist and musicologist, Adorno was fascinated with the impact of technology on the experience of music, and the industry it created. Hansen points out that Adorno was not anti-technology, but his negative criticisms are towards the industry and its monopoly on music experience. For the composer, sound recording meant the preservation of their work with elimination of interpretation, which a written score could not provide, yet 'talking machines' were in danger of becoming yet another

[26] Ibid., 80.
[27] Miriam Hansen, *Cinema and Experience,* 3, 214.

bourgeois household item. These views are reflected in *On the Social Situation of Music* (1932), *The Curves of the Needle* (1927), and *The Radio Symphony* (1941).[28] These texts will be vital for the analysis of *Anbruch*, as not only did Adorno contribute to the journal himself, but his arguments are often echoed within the texts. Additionally, the discussions present in Adorno's writing will add extra dimension to the analysis of the case studies, where the radio audience in Krenek's *Jonny* appear to mimic Adorno's description of passive listening.

In *The work of Art in the age of Mechanical Reproduction* (1936) Benjamin discusses the impact of mass commodification on art and its reproduction within modernity. Mechanical reproduction did not simply change the consumption of art, but also its production, its presence in time and space, and its uniqueness, which Benjamin coins the term 'aura'.[29] This will be essential in the analysis of debates on music and radio within *Anbruch* as the ritualistic aspects of music making (such as tuning) were mimicked in radio performance and the alteration of musical tone and grandeur is lost. This is what Adorno describes as the degeneration of music by radio transmission.[30] Thus, these works of Benjamin and Adorno will be drawn upon in the following analysis of *Anbruch,* as they echo its contributors especially in terms of technological limitations of radio technology and its future potential to produce music. The chapter will now focus on the articles in *Anbruch.* The analysis will begin with the examination of discourses relating to music and the machine within *Anbruch.*

If opera is considered a medium, then the analysis of opera and radio ought to be treated as the study of multimedia. In recent scholarship there has indeed been a shift of focus from mono-media to multimedia studies. James Curran has identified the need for a change of focus from mono-media to multi-media research within current media histories.[31] Curran observes that press historians tend to focus on newspapers and film scholars with cinema, which creates narrow research, and often neglects media's relationship with society.[32] His analysis shows the need for new perspectives in media history; media should be investigated within the wider social context and their analyses incorporate a variety of narrative approaches. When this is applied, media history

[28] See: Theodor Adorno, Trans Richard Leppert, *Essays on Music,* (Berkeley: University of California Press, 2002).
[29] Walter Benjamin, *The Work of Art in the Age of Mechanical Reproduction,* trans. J. A. Underwood, (London: Penguin Books, 2008).
[30] Adorno, 'The Radio Symphony', *Essays on Music*, 253.
[31] James Curran, *Media and Power,* (London: Routledge, 2002).
[32] Ibid., 1.

narratives unfold within developments of society, showing media's *relationship* with society, rather than institutionalised focussed approaches (such as a focus on the BBC in radio history).[33] Therefore a move towards multimedia histories is essential. This has also been recognised by James Lyons and John Plunkett.[34] Both aim to present media through their relationships to each other, by examining the multimedia characteristics of new media.[35] This thesis will consider these methods of multimedia history, as it is concerned with the relationship between opera and radio during the Weimar Republic, and in particular the use of radio as a compositional tool. It will consider the case studies as multimedia works, focusing on the flows between the two media, enhancing the interdisciplinary nature of this thesis, and considering opera's place within the discipline of media history.

As opera is a traditional medium of entertainment dating back to the late 16th century, and radio was a new medium in the 1920s, relationships between old and new media are appropriate to this research. According to Gitelman and Pingree, all media are once considered new, not always initially accepted, and sometimes question the place of existing media.[36] They highlight that all 'new media' go through a phase of identity crisis, presenting their uncertain status to existing media.[37] This suggests that old and new media present complex relationships, and experimentation plays a key part in the development of new media. When old and new media become entangled, a complex relationship of coexistence often emerges.[38] In the case of Weimar opera and radio broadcasting, however, it is not just the new medium which was experimental. *Zeitoper* dabbled with new media in order to redesign and reform itself. Opera, the 'old' medium in the context of this research, attempted to update itself. Opera was by no means obsolete during the Weimar Republic, but it did experience a phase of crisis. The addition of new media, and in particular radio technology, on the opera stage added another dimension to opera's multi-media aesthetic. Vice versa, the broadcasting of opera specifically written for the radio challenged the traditional performance practice of opera, offering a new dimension

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[33] Ibid., 47.
[34] James Lyons and John Plunkett eds., *Multimedia Histories: From the Magic Lantern to the Internet,* (Exeter: University of Exeter Press, 2007).
[35] Ibid., xvii.
[36] Lisa Gitelman and Geoffrey B. Pingree eds., *New Media: 1740-1915,* (Massachusetts: MIT Press, 2003), xii.
[37] Ibid.
[38] For an example of a study which provides examples of old and new media which coexist and where the old medium does not become obsolete, see: Asa Briggs and Peter Burke, *A Social History of the Media: From Gutenberrg to the Internet,* (Cambridge: Polity 2005).

in operatic experience. This thesis proposes to argue that opera during the Weimar Republic was not simply imitating or merely coexisted alongside new media, but became *entangled* with it.

This claim is informed by the concept of 'Entangled Media Histories'. The foundations of entangled histories originate from the notion of the *histoire croiseé/Verflechtungsgeschichte* or *transfert culturel/Kulturtransfer* employed by historians such as Michael Werner and Bénédicte Zimmermann.[39] These scholars aim to move beyond comparative pasts, and investigate interrelations, flows and exchanges within history. This so-called 'entanglement' has in recent years been applied to media history.[40] It has been suggested by Cronqvist and Hilgert that 'Entangled Media Histories' has a significant place within modern media history.[41] Like Lyons and Plunkett, 'Entangled Media Histories' invites scholarship to move beyond single media systems, an approach which offers more than a temporary or selective comparison or as defined by Cronqvist and Hilgert, studies of transmedia.[42] When opera is considered a multimedia art form, its relationship with radio can be considered a form of transmedia. Both the use of opera as a prop and the genre of radio opera blur the boundaries between these two media by revolutionising the performance of opera. Furthermore, Cronqvist and Hilgert call for a broader definition of media, as some forms of traditional media (such as bells, phonograph, telephones and typewriters) have often been omitted from media history.[43] This thesis considers opera as a medium, by placing *Zeitoper* within the context of media history and observing the transmedia flows between opera and radio in terms of dramaturgical solutions (Krenek's *Jonny*) and in *Funkoper* (Goehr's *Malpopita*).

Furthermore, Cronqvist and Hilgert assert the need for transborder and transnational analysis within the context of mass media, where 'The concept of transnationality is central to any entangled media historiography – in theoretical approach

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[39] Michael Werner & Bénédicte Zimmermann, 'Beyond Comparison: *Historie Croissée* and the challenge of Reflexivity,' *History and Theory 45*, (February 2006): 30-50, JSTOR, and Michael Werner & Bénédicte Zimmermann, 'Vergleich, Transfer, Verflechtung. Der Ansatz der Histoire croisée und die Herausforderung des Transnationalen.' In *Geschichte und Gesellschaft*, 28 (2002): 607–636, JSTOR.
[40] The Entangled Media Histories research network (EMHIS) have recently proposed that 'Entangled Histories' should be applied within the field of media history. The EMHIS network was created in 2013 and consists of a group of academic and post graduate researchers from Bournemouth University, Lund University and Hans Bredow Institute Hamburg, https://emhis.blogg.lu.se/ (Accessed 05/02/2018).
[41] Marie Cronqvist and Christoph Hilgert, 'Entangled Media Histories,' *Media History*, 23:1, (January 2017), 130-141, Taylor Francis Online: http://www.tandfonline.com/doi/full/10.1080/13688804.2016.1270745
[42] Cronqvist and Hilgert, 'Entangled Media Histories,' 130.
[43] Ibid., 133.

and empirical analysis as well as research in networking practice.'[44] An example of radio history which is informed by entanglements is Suzanne Lommers' study of inter-war radio in Europe.[45] Lommers describes broadcasting as an infrastructure rather than entertainment or a series of programmes and examines the relationships between these infrastructures. The book presents a transnational history of radio broadcasting from the perspective of the International Broadcasting Union (IBU), by linking national and local systems, replacing a state centred history. In the case of opera, it can be considered a transnational *and* transborder art form, as it is often translated and performed outside its country of origin, and composers often worked abroad, premiering operas outside their country of origin.[46] Furthermore, opera can be subject to transnational stimuli. For example, opera during the Weimar Republic contained various Americanisms, such as jazz, the Fordian production line, and popular dance music. The influence of transborder relations is highlighted in chapter 3, which examines *Anbruch,* a music journal which represented a microcosm for Weimar musicology published in Vienna. The cross-border relationships between these musicologists and composers is also noteworthy and will be important when discussing this journal, showing not only the crossing of territorial borders, but those of human relationships, both professional and personal.

Entangled Media Histories is also concerned with materiality; the physical properties of media and its output.[47] Often, the way media were portrayed within Weimar *Zeitoper* was through their material properties. For example a radio set on the stage, a gramophone, newspapers or a chorus of workers with typewriters. Yet these were not simply material objects meant as visual props, they became part of the musical sound. The chorus of typewriters in Hindermith's *Neues vom Tage* (1929) and the Tango played on the gramophone in Weil's *Der Zar lässt sich photographieren* (1927) are examples of appropriation of the materiality of media objects in order to incorporate them into the music. The material properties are exploited both visually and sonically in Weimar *Zeitoper,* either as a simulation of media experience or compositional experimentation. Media objects in *Zeitoper* then should not be viewed as simply props, but exploitations

[44] Ibid., 132.
[45] Suzanne Lommers, *Europe on Air: Interwar projects for Radio Broadcasting,* (Amsterdam: Amsterdam University Press 2011).
[46] For Example Mozart's *The Marriage of Figaro* was written in Italian (due to its genre of opera buffa), premiered in Vienna in 1786, and then produced in Prague later that year. Since its premiere it has been performed in opera houses worldwide and its numbers translated into many languages for performance and surtitles.
[47] Cronqvist and Hilgert, 'Entangled Media Histories,' 134.

of materiality as they became embedded in the musical sound, helping the dissemination of traditional operatic performance boundaries. This will be demonstrated clearly in this research as the use of radio in opera, and opera on radio, blurred the borders of traditional performance practice.

DEFINITION OF THE KEY TERMS

Before an outline of the thesis is presented, it is useful to define the key terms which will contribute to the analysis of the case studies:

Modernism

Modernism refers to cultural artefacts created by the avant-garde as a response to modernity. Attempts have been made to define the characteristics of modernism and place it within historical context. Huyssen's work identifies the insistence on the autonomy of the work of art, its hostility towards mass culture, the anxiety of contamination by its other (mass culture) and its radical separation from everyday life as characteristics of modernism which have continuously been challenged.[48] Modernism during the Weimar Republic certainly displayed these characteristics and was subject to many stimuli, such as war, economic and political crisis, technology and media, which meant that Weimar modernism was diverse in nature and was composed of many artistic genres. The case studies in this thesis are considered products of modernism, which display modernist techniques, and attempt to evoke critical thought amongst their audiences.

Mass Culture and The Masses

The use of the term 'masses' or 'mass culture' first began in the Nineteenth Century in order to describe society after industrialisation. According to Naremore and Blantlinger, the term 'mass culture' has a double meaning; on one hand it points the culture of the masses/the majority of people most of the time, and on the other it indicates culture which is mass produced by industries.[49] This divide of producers and consumers is indeed thought provoking as it suggests relationships between industry and consumers. In the case of this thesis, mass culture will refer to the products of industry, such as media, popular music, and so forth and the masses will define the audiences who respond to these

[48] Andraes Huyssen, *After the Divide: Modernism, Mass Culture and Postmodernism,* (Indianapolis: Indianapolis University press), vii.
[49] James Naremore and Patrick Brantlinger, 'Introduction: Six Artistic Cultures,' in Naremore and Brantlinger eds., *Modernity and Mass Culture,* 1-23, 1-2, JSTOR.

mass cultural products. Mass culture and the masses will not only be represented in the analysis of *Anbruch*, but also in the operatic case studies.

Technology and Materiality

As discussed in the Methodology section, this research is informed by Entangled Media Histories which encourages a consideration of materiality, which is not to be confused with technology or material culture. Technology refers to specific machinery developed within particular industries as a result of scientific advance. For Cronqvist and Hilgert materiality is the physical property of media and its output.[50] In this thesis the term 'technology' will be used to describe specific equipment and advances made in radio and opera, whereas 'materiality' will be refer to emphasised material qualities of this technology. For example, Krenek's treatment of the loudspeaker in the radio scene of *Jonny,* where its material qualities are enhanced by its position, lighting, and its worship by the audience.

The Invisible Voice

The term 'invisible voice' is a key to the analysis of *Funkoper,* because when opera is broadcast on the radio, it is invisible. The idea of the invisible voice has been recognised as a romantic trope by Kravitt in his analysis of the Nineteenth Century German Lied.[51] Kravitt notes that during performances of Lieder, singers were placed behind screens or veils so that the audience was not distracted by the presence of the singer in their experience of the music. In contrast, Laing presents an idea of the disembodied voice, rather than an invisible one: 'The very name 'talking machine' suggests an equivalent need to provide a source for the recorded sound, but as we have seen this source could only be extra human.'[52] In this view, early sound recording equipment was seen by audiences as an extension of the body, as audiences were used to seeing musical performers as well as hearing them. Arnheim referred to this phenomenon as the 'blindness of the wireless' in his discussion of 'disembodied figures'.[53] Sconce has also referred to voice radio as disembodied and commented on the perception of early radio's

[50] Cronqvist and Hilgert, 'Entangled Media Histories,' 134.
[51] Edward F. Kravitt , 'The Lied in 19th Century Concert Life,' *Journal of the American Musicological Society,* Vol.18, No.2 (Summer 1965), 207-218. JSTOR.
[52] David Laing, 'A Voice without Face: Popular Music and the Phonograph in the 1890s,' *Popular Music,* vol.10, no.1, The 1890s, (Jan 1991), 1-9, JSTOR.
[53] See Arnheim's discussion 'In Praise of Blindness, Emancipation from the Body,' Rudolf Arnheim, Trans., Margaret Ludwig and Herbert Read, *Radio,* (London: Faber and Faber, 1936), 133-203.

relationship with the dead.[54] The idea of the disembodied voice will be applicable in the examination of the ghostly aesthetic created by Krenek in the radio scene in *Jonny.* In the analysis of Brand's *Maschinist Hopkins* and Goehr's *Malpopita,* the voices are not disembodied, but invisible, more in line with ventriloquism, which does not permit the eye to see the voice. In contrast, Steven Connor highlights the ability of sound to create a picture and the concept of sonorous autonomy as a romantic dream for radio ventriloquism.[55] The idea of sonorous autonomy is at the very heart of *Funkoper,* the ear no longer has assistance from the eye and the ear alone must conjure the imagery, the opera is invisible to the audience. Another reason to use the term 'invisible voice' is that Max Brand uses the term in his score for *Maschinist Hopkins* when describing the voices of the machinery. The voices sing offstage in order to create the illusion that the machines are singing. Thus, the invisible voice is a central component of the analysis of the case studies.

OUTLINE OF THE THESIS

Before the case studies are examined in depth, it is essential to contextualise the research and discuss current discourses within the literature, in order to define the contribution the thesis makes to academic scholarship. Therefore, the next chapter will provide context for the research. It will summarise the political and economic climate within the Republic, in order to explain the artistic climate within Weimar Germany. It will present a history of music within the Weimar Republic, both instrumental and operatic, discussing the specific features of Weimar opera, and more specifically the *Zeitoper*. It will then present a history of early radio in Germany, outlining the development of the *Hörspiel* and radio programming. As well as providing context, the chapter will examine the scholarship on the Weimar Republic from cultural studies, history, media history and musicology. It will define the gaps in the research that this thesis aims to fill as well as highlighting key debates which will be considered in the case studies. The chapter is structured by the common themes discovered within the literature: the call for scholarship which looks beyond Berlin as a microcosm for Weimar culture, modernism and Weimar culture, on mew media and technology Jazz and Americanisation/Americanisms, and mass culture

[54] See: Jeffrey Sconce, 'The Voice from the Void: Wireless, Modernity and the Distant Dead', *International Journal of Cultural Studies,* vol.1 (2), (1998): 211-232, JSTOR

[55] Steven Connor, *Dumbstruck: A Cultural History of Ventriloquism,* (Oxford: Oxford University Press, 2000) 21.

and artistic consciousness. It is important to note that the scholarship relating to the specific chapters are discussed in their relevant chapters, rather than the literature review. The reasoning here is to avoid repetition and to emphasis the new perspectives each chapter offers compared to existing material.

Chapter 2 will largely focus on the journal *Musikblätter des Anbruch,* showing how this journal was a microcosm for wider Weimar musicology. Firstly it will examine wider themes and influences in musicology during the Weimar years. It will give an overview of key discourses within musicology, including the work of Paul Bekker. It will pay particular attention to the shift in focus regarding the journal's attitude towards radio. During the mid-1920s *Anbruch's* contributors viewed radio as a novelty and a means of dissemination of existing music, shown by articles that discuss *Musik im Radio,* meaning existing music that was transmitted over the ether. These articles deal with music and the machine, with an emphasis on the mechanical nature of music and technology, yet critics began to deal with the concept of radio invisibility, which is essential when considering the phenomenon of radio opera. During the later years, this attitude changed as composers began to see the potential of *Radiomusik,* meaning music specifically written for the radio. This is especially apparent in Frank Warschauer's 1929 column *Musik und Technik,* which includes specialist technical experts and articles specifically aimed at the radio composer. The analysis will provide the framework towards an understanding of the rationale adopted by opera composers during this era. It is important to understand academic attitudes in the Republic as this will show relationship between theory and practice. The changing attitudes in this journal are reflected in the subsequent case studies which this thesis presents, showing how composers and music critics engaged both theoretically and practically with radio.

Chapter 3 will offer new perspectives on the radio scene in Ernst Krenek's *Jonny spielt auf* (1927). It will examine the set up and treatment of the radio in scene 7, its representation of the 'invisible voice' and its simulation of audience behaviour. The analysis will draw upon articles from the previous chapter, in order to establish Krenek's position in the academic debate on new media. It will duscuss the jazz influences within the work, showing how *Zeitoper* was subject to Americanisms. It will examine Krenek's score directions, in order to envisage the setting of the scene and understand its contrast to the previous setting of the aria in scene 2, *Als ich damals. Als ich damals* is presented as an aria from one of Max's operas and in scene 2 Max and Anita sing this aria in Max's apartment with an onstage piano. This intimate setting is contrasted by the radio

transition, as the hotel guests complain of the modern music and the radio creates greater distance between Max and Anita, highlighting the struggles within their relationship. The ghostly aesthetic which Krenek creates in this scene is synonymous with the relationship of early radio to the dead and their disembodied souls. This analysis will also include Krenek's representation of a radio audience, which appears hypnotised and 'passive'. They only respond to Jonny's caricature of jazz music, appearing to mimic the arguments of many critics, during and after the Republic. Furthermore, this chapter will consider entanglements within media history, specifically transnationalism, transmedia and materiality (as put forward by Cronqvist and Hilgert), in order to offer new perspectives on the radio scene in *Jonny* by considering media history discourses which have previously been overlooked in current literature on the work. Krenek's *Jonny spielt auf* offers an example of radio as a prop erected on stage to solve dramaturgical complications. Nonetheless, it provides an interesting perspective on the representation of a radio experience within the medium of opera, thus emphasising the entangled nature of Weimar *Zeitoper*.

Following this, chapter 4 provides an interlude between *Zeitoper* and radio opera. It will explore Max Brand's *Maschinist Hopkins* (1929). The analysis will contemplate Brand's imagination of the machine and outline how it visually dealt with a factory setting. It will focus on Brand's perception of the 'invisible voice' into the very essence of the opera, as opposed to Krenek's simulation in *Jonny.* Brand's use of the invisible is essential in understanding how this work is set apart from *Zeitoper,* underpinning the originality this chapter offers, building upon existing scholarship on this opera. It will also show how Brand attempted to address the issues raised in his earlier essay in *Anbruch* regarding the problem of mechanical music and opera. The chapter will show how *Maschinist Hopkins* acts as a prelude to radio opera. This analysis will also act as a comparison to Goehr's *Malpopita,* as both works simulate a factory setting, but Brand's setting is the traditional stage, whereas Goehr's setting is the radio.

The final chapter will explore Walter Goehr's *Malpopita*, an opera composed specifically for radio performance. The chapter will present a full analysis of this *Funkoper*, which until now has not been discussed within musicology or media history. It will show how Goehr's work in the radio and film industries enabled him to understand the techniques required to create imagery with the absence of visual stimuli. It will analyse the score in detail, highlighting instructions within the text regarding the microphone, showing how Goehr constructed a sense of sonic space. This chapter will

also place this work in the context of experimental opera and radio during the Weimar Republic. It will explore the themes of the opera, showing how its plot mirrored Brecht and Weill's *Mahagonny* (1930), and indicating a clear presence of critical theory within the work. Furthermore, it will draw upon texts from *Anbruch*, showing how Goehr implemented elements of theory, as well as referring to Arnheim's work on radio and discourses within critical theory. The analysis of Goehr's *Malpopita* will contribute to the existing narratives of Weimar opera and experimental radio, where the merging of these media show forward thinking and experimentation within the Republic, despite political and economic turmoil that ultimately led to its demise.

The thesis will conclude by showing the key observations of the case studies, drawing comparisons between them and explaining the new perspectives and findings from the research. It will also discuss entanglements from the case studies, showing complex relationships between opera, media and musicology during the Weimar Republic. Furthermore, it will acknowledge the impact of the Third Reich and comment on the lives of the composers during exile. Finally, it will end by pointing to further research emerging from this project.

Chapter 1

Historiography: Context and Review of the Literature

The Weimar Republic defines the inter-war years in Germany (1918-1933). November 11 1918 marked the end of the First World War, resulting in humiliation and catastrophic losses for Germany. In 1914, 2 million had been killed and 4.7 million had been wounded in battle which left both physical and psychological scars.[1] The impact of the Kiel mutiny on November 3, as well as the war defeat, forced Kaiser Wilhelm II to abdicate to the Netherlands on November 9. This meant that Germany was no longer ruled by an Emperor and needed a new government. Following the abdication of the Kaiser, the leader of the Social Democratic Party (SDP) Friedrich Ebert, became Chancellor. The end of 1918 was an unstable time for Germany. There were rebellions, including the Sparticist Uprising in early January 1919 by the Communist Party of Germany (KDP), resulting in the assassination of Karl Liebnecht and Rosa Luxemburg by the *Freikorps*, a voluntary army of World War 1 veterans. The elections in January 1919 gave the SDP the majority, resulting in Germany's first elected leader. Ebert and his party drew up a new constitution for Germany, meeting in Weimar, and thus the Weimar Republic was born, a democratic Republic ruled by proportional representation.

In August 1919, the Treaty of Versailles was written by the Allies for Germany to sign. The treaty forced Germany to give up her land, reduce her armed forces, and pay considerable reparations and to take full responsibility for the war. This treaty had a ripple effect on the politics and economy in Germany during the 1920s, and right-wing political groups opposed the Treaty and all it stood for. In March 1920, Wolfgang Kapp led a troop of *Freikorps* (a group of soldiers who had fought in the war and were now unemployed) in an attempt to takeover Berlin. The Kapp putsch was overthrown when the workers of Berlin went on strike, refusing to co-operate with the *Freikorps.* The reparations put immense strain on the economy, contributing to existing inflation in Germany, and resulting in hyper-inflation. Germany's inability to pay the reparations lead to the occupation of the Ruhr in 1923 by French troops.

Following the years of inflation and hyper-inflation came the 'Stresemann era' of 1924-1929, where the centre right governed the Republic's so-called 'golden years', and

[1] Eric D. Weitz, *Weimar Germany Promise and Tragedy*, (Princeton: Princeton University Press 2007), 8.

Gustav Stresemann was chancellor. He put in place economic plans to try and stabilise the Republic. These included a new currency, the *Rentenmark*, the Dawes and Young plans with the USA, and calling off the passive resistance of the workers in the Ruhr, meaning that goods were back in production and there was no longer a need to print excess money to pay striking workers. This, and the promise to begin the repayments again, persuaded the French troops to leave the Ruhr in 1925. These years are often referred to as the 'golden years' due to the iconic cultural output in art, music, cinema, radio, and cabaret.

Finally the years 1929-1933 are associated with the impact of the depression and the Nazi's final steps in their rise to power. October 1929 was the year of the Wall Street crash, which caused catastrophic consequences for the Weimar Republic. Germany had borrowed money from America in the mid-20s, but the Wall Street crash meant that America demanded the money back, so the economy in Germany crashed. By 1932, unemployment had reached over six million, Germany was in crisis and this led to the National Socialists gaining full control, thus the Weimar Republic was over. [2]

These political and economic changes during the years of the Republic influenced both artistic output and the debate on the place of art in society. As a result, artistic output during the Weimar years was complex in ideas and styles, and has thus attracted interdisciplinary scholarship. To begin with, the idea that Berlin acted as a microcosm for culture and artistic express has been challenged in recently, resulting in a call for a broader approach to Weimar Research. As well as highlighting the interdisciplinary nature of Weimar studies, this discussion about Berlin lay the foundations for the themes within Weimar historiography, highlighting the diversity of modernism and the dichotomy of mass culture, Americanisms and the relationship between man and machine. Expressions of modernity have been identified, where cultural expression often portrayed an entanglement of artistic genres which echoed a society in crisis, emphasising the complexity of Weimar modernism. Scholars have also been attracted to the process of Americanisation and Americanisms in Weimar culture, where the influence of jazz appeared to seep into various art forms, such as music, paintings and even opera. As well as the political events during the Republic, artists were also influenced by new technology

[2] See: George S. Wasick and Mark R. Sadler, *The Stab-in-the-back Mythand the Fall of the Weimar Republic: A History in Documents and Visual Sources,* (London: Bloomsbury, 2016); Hans Mommsen, *The Rise and Fall of Weimar Democracy*, (Frankfurt a. Main: 1989); Anthony McEllgott, *Rethinking the Weimar Republic: Authority and Authoritarianism 1916-1936,* (London: Bloomsbury, 2014).

and media, which allowed for new outlets of representation, where the machine became a dominant feature of artistic expression. Consequently, the development of new media and the influence of America created debates around the idea of mass and popular culture which attracted both intellectuals from a wide range of field, both during the Republic and within modern scholarship. The debates will now be explored in order to highlight key discourses which will inform the examination of the case studies, and highlight the current gaps in scholarship which this thesis aims to address.

BEYOND BERLIN

There is often the temptation within Weimar scholarship to focus on Berlin as a microcosm for Weimar culture. This is somewhat problematic as it does not present a clear picture of Weimar experience, as Berlin did not necessarily represent the wider Republic. This notion has been contested in more recent discussion, in contrast to earlier publications which focus their attention on Berlin as a metropolitan hive of modernity. An early account of the Weimar Republic presented by Peter Gay is an example of this.[3] The key argument which he presents is that the Weimar Republic did not create new cultural forms and methods of expression, it merely liberated what was already present.[4] Gay's analysis of the Republic is centred on Berlin, drawing particular attention to the intellectuals and their reactions to Weimar economy, politics and revolution, rather than the experiences of ordinary life in the Republic. This is somewhat restrictive in the presentation of the Weimar era as it limits the sources to the middle and intellectual classes, rather than expanding upon wider class experience.

Other research has explored the Weimar Republic by centring on Berlin and its intellectual milieu, for instance Alex de Jonge presents a more rounded experience of the Weimar Republic, but still presenting Berlin as a microcosm of Weimar culture and a garish exhibition of modernism, with claims that to the Bavarian eye Berlin was a cold, harsh nightmare. [5] This suggests that Jonge perceived the Weimar Berlin as something new and unique, rebellious towards German traditions, which appears to contradict Gay's stance of liberation rather than creation. Furthermore de Jonge paints a picture of an immoral Berlin, drawing particular attention to gender, sexuality and prostitution, stating that the upper and middle classes had lost all moral authority.[6] De Jonge argues that

[3] Peter Gay, *Weimar Culture – The Outsider as Insider,* (London: Penguin Books, 1968).
[4] Ibid, 6.
[5] Alex de Jonge, *The Weimar Chronicle: Prelude to Hitler,* (London: Paddington Press, 1978).
[6] Ibid., 169.

Weimar Germany failed to break free from the past, as politicians and teachers from the old regime were still influential in office.[7]

Alexandra Richie's account also presents Berlin as the forefront of German culture, particularly in the mid-twenties. She states that 'the economic and political healing of the 1920s affected Berlin more profoundly than any other German city'.[8] Her reasoning for this claim is that Berlin exploded outwards to form suburbs and was loosely linked with urban parishes. This suggests the large scale of Berlin, both in terms of geography and population and fuels the idea of Berlin as the centre of Weimar culture. This is reflected in Eric D Weitz's work, which focuses on Berlin in order to explore the relationship between art and politics during the Republic. Weitz outlines the Republic's promise for cultural renewal and rebirth and the artistic and intellectual promise was suffocated by politics and mass culture. In order to narrate a vivid walking tour of Berlin he uses a wide variety of primary sources, such as the writings of Franz Hessel, Joseph Roth, Alfred Döblin, Thomas Mann and Christopher Isherwood.[9] Weitz embodies a narrative approach in his discussion, and its popular appeal limits his engagement with academic discourses, such as critical theory, National Socialism, and Weimar psychology.

In more recent scholarship, researchers have moved away from the notion of the Berlin avant-garde as a representation of wider Weimar experience. In contrast to Gay, Hung, Weiss-Sussex and Wilkes confront the stereotypical, nostalgic analysis of the Republic that previous scholarship has adopted.[10] Hung states that there appears to be a post 1945 nostalgic image of Weimar culture, which bestows on it the trademark of cultural glitter and political doom.[11] Hung challenges the approaches of Gay and Weitz, critiquing their one-sided portrayal and the notion of the Berlin avant-garde as a representation of Weimar culture, stating historians should look beyond the clichéd imagery of the 'artful dance on a political volcano'.[12] Corey Ross has also contested the idea of Berlin as a microcosm of Weimar culture. He argues that there was no uniform

[7] Ibid., 136.
[8] Alexandra Richie, *Faust's Metropolis: A History of Berlin,* (St Ives: Clays Ltd, 1998), 330.
[9] Ibid., 41-80.
[10] Jochen Hung, Godela Weiss-Sussex and Geoff Wilkes ed., *Beyond Glitter and Doom: The Contingency of the Weimar Republic,* (Iudicium: Munich 2012).
[11] Jochen Hung, 'Beyond Glitter and Doom. The New Paradigm of Contingency in Weimar Research,' *Beyond Glitter and Doom,* 9-15.
[12] Ibid., 14.

cinema landscape in Weimar Germany and that cinema culture varied from city to city.[13] Recent developments in Weimar historiography therefore point to the importance of seeing Berlin as a foundation for a broader Weimar narrative. Weimar scholarship then, must look beyond the dichotomy of cultural experimentation in Berlin.

This thesis will further contribute to these developments by moving beyond Berlin and considering transborder relatationships such as *Anbruch*, a Viennese music journal, which included a wide range of German critics who work in and outside of Berlin. This is important as it confirms that the impact of intellectual milieus impacting on culture were not solely confined to Berlin. Furthermore, opera during the Weimar Republic was not only performed in Berlin, for example Ernst Krenek's *Jonny spielt auf* (1927) premiered in Leipzig and was performed in many cities in and outside Germany. It is important therefore, to consider Berlin as an important part of the Weimar Republic, but not assume it as a microcosm for Weimar culture, as this can lead to cultural stereotypes and important artefacts and discussion being overlooked.

MODERNISM AND WEIMAR CULTURE

The Weimar Republic was a unique period, where artists had a variety of stimuli. They were influenced by the tragedy of war, modern urban life, economic struggles and turbulent politics, which made Weimar modernism extremely diverse and complex as artists attempted to respond to crisis. From inflation to the occupation of the Ruhr, and from Dadaism to the Bauhaus, Weimar Germany presents researchers a variety of discourses and artefacts within varied disciplines. Weimar culture was extremely diverse, and scholars have attempted to break it down into collective cultural activities such as cabaret, jazz, radio, cinema, and *Zeitoper*. In order to understand the historical narrative of the collective, it is necessary to examine the existing dichotomies within Weimar culture discourses, such as objectivity and subjectivity, new and old, traditional and modern, popular and elitist, individual and collective.

Expressionism

During the early years, Expressionism was a dominant form. As already stated, Gay argues that the Weimar Republic did not necessarily create new art forms, but simply liberated those that already existed.

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[13] Corey Ross, 'Mass Culture and Divided Audiences: Cinema and Social Change in inter-war Germany,' *Past and Present,* (November 2006), 157-195, 162, JSTOR.

> There can be no doubt: the Weimar style was born before the Weimar Republic. The war gave it a political cast and a strident tone, and saddled it with a deadly quarrel; the revolution gave it unprecedented opportunities. But the Republic created little; it liberated what was already there.[14]

Expressionism is a prime example of what Gay describes since its techniques and artists were active before and during the First World War, for example the work of Kandinsky and Eduard Munch's *The Scream* (1893), clearly portray techniques of Expressionism.[15] Gay constructs his narrative by arguing that the Republic was fundamentally doomed from its outset. He uses the symbolism of a father and son to explain the relationship between politics and the arts, where the son represents the expressionist years and the bid for rational freedom against the father's irrational authority.[16]

In November 1918, a group of socialist, expressionist artists lead by Max Pechstein and César Klein, formed the *Novembergruppe,* whose work aimed to support the socialist revolution in Germany, which inspired their name. Artists in the group included George Anthiel, Max Butting, Hannah Hoch, Wassil Kandisnky, and Kurt Weill, amongst many more well-known artists from the 1910s and 1920s.[17] Expressionism was the antithesis of Impressionism, where the work of art presented the inner anguish and emotions of the artist. Expressionism was centred on the artist and their expression, rather than the mediator (for example, the performers of a piece of music were not important, unlike the virtuoso musicians of the romantic period, but were merely tools in communicating the works of the composer).

In art, Expressionism was characterised by bright colours, shapes and distinct brush strokes. In cinema, surreal sets, dark shadows and optical effects were abundant. The subjective eye was the heart of Weimar Expressionism, meaning the spectator could connect with the mind of the artists, and was able to explore the dark corners of the mind. In music, atonality became a defining factor of expressionist pieces, where composers such as Schoenberg, Berg and Webern dismantled traditional tonality in favour of harsh

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[14] Gay, *Weimar Culture*, 6.
[15] For discussions on Expressionism, its origins and the German situation see: R. S. Furness, *Expressionism: The Critical Idiom Reissued,* (London: Routledge, 1973), Peter Selz, *German Expressionist Painting* (Los Angeles: University of California Press, 1957); Dietrich Scheunemann eds., *Expressionist Film: New Perspectives,* (London: Boyden & Brewer Inc., 2003).
[16] Gay, *Weimar Culture*, 121.
[17] See: Ralf Burmeister, *Freedom: The Art of the Novembergruppe 1918-1935,* (Prestel, 2018), Shearer West, *The Visual Arts in Germany 1890-1937: Utopia and Despair,* (Manchester: University of Manchester Press, 2000), Ida Katherine Rigby, 'German Expressionist Political Posters 1918-1919', *Art Journal,* Vol.44, No. 1, (Spring 1984), 33-39.

dissonance and angular rhythm. Arnold Schoenberg (1874-1951) invented the twelve tone technique which was developed by his contemporaries of the Second Viennese School (1903-1925). With the twelve tone technique, Schoenberg attempted to replace one system of writing music with another, a system with no tonal hierarchies where all notes are considered equal.[18] Expressionism also brought new performance techniques such as *Sprechstimme* and *Sprechgesang.*[19] These performance methods will be explored in this thesis as *Sprechstimme* and *Sprechgesang* were suitable for radio performance because they utilised early radio's aptness to the human voice as opposed to musical instruments. Elaine Padmore's work on Weimar expressionist opera argues that Expressionism attempted to not to represent an object but the artist's subjective reaction.[20] She also points out that Expressionism in opera relates to German *and* Austrian operatic output between 1910 and 1935.[21] This highlights the importance of studying beyond the experience of Berlin when analysing Weimar modernism, as there were clear entanglements between Austria and Germany, which will be explored in the analysis of the journal, *Anbruch.*

An example of expressionist opera is Alban Berg's *Wozzeck,* which was first performed in 1925. The opera was based on the play, *Woyzeck,* by Georg Büchner, which he began in 1836. The title figure, Wozzeck, is a traumatised soldier, haunted by the horrors of war and his jealousy leads him to commit acts of violence. The atonality and harsh dissonance in Berg's score brings to the fore Wozzeck's psychological trauma and assist in the illustration of his terrible visions. As well as the 12 tone technique and *Sprechgesang,* Berg draws upon folk songs in order to highlight the working class community in which the characters live.[22] The themes in this opera echo the psychological horrors of war which many scholars acknowledge as a major influence on Weimar

[18]Members of the Second Viennese School included Arnold Schoenberg, Anton Webern, and Alban Berg. The twelve tone technique is where a composer uses all twelve notes of the western classical music scale and arranges them in any order. The composer will then layer inversions, retrogrades, and retrograde inversions to create dissonant harmony. The music is no particular key, therefore extinguishing tonal centres and pitch hierarchy.

[19] *Sprechstimme* and *Sprechgesang* are two similar vocal techniques, somewhere between song and speech. *Sprechstimme* is further towards speech, where pitches are estimated and written with a cross head notation. Whereas *Sprechgesang* is more a replica of classic opera recitative, the pitches are sung with a speech-like articulation.

[20] Elaine Padmore, 'German Expressionist Opera: 1910-1935,' *Proceedings of the Royal Musical Association, 95th Session,* (1968-1969): 41-43, JSTOR.

[21] Ibid., 42.

[22] See: George Perle, *The Operas of Alban Berg: Volume one/Wozzeck,* (Berkeley: University of California Press, 1980); Douglass Jarman, *Alban Berg Wozzeck,* (Cambridge: Cambridge University Press, 1989); Elaine Padmore, 'German Expressionist Opera 1910-1935', *Proceedings of the Royal Musical Association 95th sess.* (1988-89), 41-53.

modernism and was a very real experience for many Germans, for example Alexandra Richie points out that, 'the streets of Berlin were haunted by the ghosts of war.'[23] Wozzeck embodies this psychological trauma of war as he himself is haunted by these 'ghosts', presenting the audience with a horrific image of anguish, which many could directly relate to.

Neue Sachlichkeit

To counter Expressionism, some artists chose to work within the sphere of *Neue Sachlichkeit,* or *New Objectivity.* This differed from Expressionism as it aimed to present an objective reality of the world, which again included objective images of war, as many of its artists served in the First World War. *Neue Sachlichkeit* can also be described as objective realism, and a rejection of the subjective surrealism of Expressionism. This movement, like Expressionism, not only captured the horrors of war for the soldiers, but also for the people at home in Germany, presenting an unsentimental realism to address contemporary culture in the Weimar Republic.

The term *Neue Sachlichkeit* originated from the exhibition in Mannheim in 1923. Paintings of the *New Objectivity* did not shy away from including unflattering features and psychological effects, where the images often become disturbing to the viewer. Key painters of *Neue Sachlichkeit* included Otto Dix and Georg Grosz, whose works exposed the corruption of middle class society, and serve as examples of satire on the human condition. In music this included, Neo Classicism, *Mechanische Musik* (mechanical music), and *Gebrauschsmusik* (music for use). Christopher Hailey notes that with *Neue Sachlichkeit,* 'music was no longer to be a vehicle for expressing ideas and emotions but a neutral medium of sound obeying its own phenomenological laws of expressing only itself.'[24] This meant that the emotions of anguish and despair which had been so present in expressionist music, were no longer of interest to composers, as they sought to explore neutral objectivity within their work.

Paul Hindemith (1895-1963) is an example of a typical *Neue Sachlichkeit* composer. His music often served a dual purpose; it provided music for amateurs whilst simultaneously leading them in the direction of new music. From 1921-1927, Hindemith wrote a series of eight pieces of music called *Kammermusik* (chamber music). These

[23] Alexandra Richie, *Faust's Metropolis: A History of Berlin,* (St Ives: Clays Ltd, 1998), 284.
[24] Christopher Hailey, '1Rethinking Sound: Music and Radio in the Weimar Republic,' in Bryan Gilliam ed., *Music and Performance during the Weimar Republic,* (Cambridge 1994),13-36, 16.

pieces do not reflect traditional refined chamber music as they communicate larger forces of sound. Hindemith limited the technical difficulty in these pieces, was often unspecific in instrumentation, and often composed pieces on location (for example when a composer visited a specific orchestra/group, or in studios).[25] This form of music making made the performer centre of the music rather than the composer. This outward view of music contrasted heavily with the self-centred nature of Expressionism. During the later years of the Republic, Hindemith experimented with mechanical composition, which included techniques like overlaying looped recorded tracks, which can be seen in his experimental piece *Trickaufnahmen* (1930).

Steve Plumb notes that *Neue Sachlichkeit* was very diverse both in output and influences, resulting in fragmentation. He argues that although the genre was influenced by abstract art, it was essentially realist in nature and this was how its 'mood of resignation' and 'scepticism' was achieved, relating in particular to the way that the object was depicted.[26] Plumb's note on diversity and fragmentation as characteristics of *Neue Sachlichkeit* is significant, as the case studies of this thesis are diverse, but show clear characteristics of *Neue Sachlichkeit* in one way or another. This example shows that the borders between *Neue Sachlichkeit* and Expressionism were often porous, where many artworks from the Weimar Republic presented features related to both genres.

This thesis will further explore the cross-border relations between Expressionism and *Neue Sachlichkeit.* For example, the analysis of Krenek's *Jonny* will show the objective portrayal of the modern world, the harsh reality of being an artist in the age of popular culture and uses modern objects within *Zeitoper*. Furthermore, Brand's *Maschinist Hopkins* is a an opera which begins within the sphere of *Neue Sachlichkeit,* presenting objective representation of a factory, yet the action becomes more expressionist where the machines devour workers, where the lighting and stage set up mimics that of expressionist cinema. In addition the debates within *Anbruch* further reflect the complexities within Expressionism and *Neue Sachlichkeit* regarding the relationships between modern music and media, where experts from media fields are consulted, blurring boundaries not only between artistic genres, but between media.

[25] See: Stephen Luttmann, *Paul Hindemith: A Research and Information Guide*, (New York, Routledge, 2004); Guy Rickards, *Hindemith, Hartmann and Henze,* (Phaidon, 1995).
[26] Steve Plumb, *Neue Sachlichkeit 1918-1933: Unity and Diversity of an art Movement,* (New York: Rodopi, 2006), 46.

Rejection of Romanticism

What Expressionism and *Neue Sachlichkeit* appear to share, was the rejection of romantic ideology. Romanticism of the late Eighteenth Century was centred on subjectivity, virtuosity, inspiration and the primacy of the individual. Robert Hill's discussion of the decline of Romanticism highlights the dichotomy of objectivity and subjectivity in Weimar modernism.[27] Hill draws upon the works of Paul Bekker, emphasising how modernism during the Republic attacked late romantic interpretative values.[28] This observation is imperative to the wider thesis, as the debate about Romanticism questioned the role of technology in the discourse of objective and subjective interpretation, which is explored in the analysis of *Anbruch*. Technically reproduced sound meant that the composer could preserve their performance intentions, eradicating the possibility of interpretation, improvisation and elaboration, which were key features of romantic music. Weimar modernism gave back the power to the composer, rather than the performer, who acted as a mediator for the artist's intentions.

Weimar music also explored functionality. For example, music of the *Neue Sachlichkeit* movement embraced the concept of *Gebrauchsmusik*, or music for use, which as Susan Cook states:

> In all forms, *Gebrauchsmusik*, reflects the optimistic view of modern life and technology shared by *Zeitoper*. Composers of *Gebrauchsmusik* further recognised the gulf between composer and community. Both the *Zeitoper* and *Gebrauchsmusik* sought to remedy this situation by creating music for the modern musical consumer.[29]

Modernism in music therefore, not only meant using modern composition techniques (such as the twelve tone technique, technologically produced sound, atonality etc.), but demanded relevance to the new Republic by connecting with its modern audience. Music needed to provide a function as well as being a work of speculative art. This shows that the idea of functionality spread further than the visual arts; as well as being visible in the Dada and Bauhaus movements, it was clearly audible in Weimar music, which once again, emphasises the cross border entanglements within Weimar modernism.

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[27] Robert Hill, 'Overcoming Romanticism: on the Modernisation of Twentieth Century Performance Practice,' Ibid., 27-58.
[28] Ibid., 43, 51.
[29] Cook, *Opera for a New Republic*, 21.

Weimar Opera

According to David Drew, the main focus for German composers was musical theatre.[30] Drew argues that the Weimar Republic restored musical theatre as a moral institution and outlined that the shift of interest from one as individual to one within the masses gave musical theatre of the Weimar Republic its characteristic form.[31] The idea of opera as a 'moral institution', according to Drew, stems from his argument that social and musical reasoning was at the heart of Weimar opera, in contrast to the myth of musical debauchery and the overthrowing of morality within Weimar libretto. Drew's account of Weimar musical theatre draws upon examples of opera which handle different techniques. The main focus of Drew's paper is Expressionism, highlighted by his analysis of Schoenberg in the introduction and his criticisms of *Zeitoper.* The *Zeitopern* of the Weimar Republic have also been discussed within musicology as an attempt to modernise the genre of opera for the modern world. Susan C. Cook's analysis of the *Zeitopern* of Krenek, Hindemith and Weill highlights that *Zeitoper* was originally a comic genre, focusing on parody, social satire, burlesque and celebrations of modern life. [32] She also states that *Zeitoper* relied on theatrical properties of the age, meaning modern objects and media presentations, such as cinema projections, gramophones and radio. Cook's detailed analysis defines the uniqueness and complexity of the *Zeitopern* within music history. She outlines the genre of *Neue Sachlichkeit,* the theatrical properties of Piscator and *Zeitheater,* discusses the Weimar obsession with jazz to show that the experimental nature of *Zeitoper* broadened the definition of modern musical theatre and was a key contributor to twentieth century operatic style.

In contrast to *Zeitoper* were the operatic collaborations of Brecht and Weill. The pair first started their collaboration in March 1927, beginning work on their *Mahagonny Songspiel.* Brecht's work on epic theatre developed a new style of stage production. Epic theatre was highly political and presented a connection of scenes which avoided illusion, with interruptions to address the audience directly.[33] Prior to the collaboration, Brecht attempted to compose the music from his plays himself, about which Kowalke notes that

[30] David Drew, 'Musical Theatre in the Weimar Republic,' *Proceedings of the Royal Musical Association 88th Session*, (1961-1962), 89-108, 90, JSTOR.
[31] Ibid., 89.
[32] Cook, *Opera for a New Republic: The Zeitopern of Krenek, Weill and Hindemith,* (Rochester: University of Rochester Press, 2010), 4. (Originally published in 1988 by UMI Research Press).
[33] For more on Epic Theatre see: Walter Benjamin, Trans. Anna Bostock, *Understanding Brecht,* (London: Verso, 1998).

it was music without musical technique.[34] The pair produced two stage operas together, *Der Dreigroschen Oper* (1928) and *Mahagonny* (1930). Brecht claimed that epic opera presented a prototype for opera as it contained elements of both opera and spoken theatre.[35] Brecht and Weill therefore pushed the boundaries of modernism with their theatrical and musical expertise. Yet the collaboration was not always smooth and each partner had conflicting ideas on presenting drama.[36] It was clear however, that in their work, the pair attempted to solve the issues brought about by the crisis of modernity in the Weimar Republic.

Approaches to Weimar Modernity

Recent scholars have responded to Detlev Peukert's view on the crisis of Weimar modernity, which argued that that the German pursuit of modernity was 'peculiarly burdened by traditionalism, illiberality and a yearning for powerful authority'.[37] For example, John Michael Krois discusses the philosophy of culture during the Weimar Republic.[38] He highlights the problematic English translation of the German term *Kultur* to 'culture'. According to Krois, the term *Kultur* originated in the nineteenth Century, and refers to the care and preservation of the (German) past, associated with art, religion and philosophy, and was often contrasted with material aspects of social life, such as the technical, scientific and political.[39] The German word *Kultur* does not then necessarily refer to the same facets as the English translation 'culture', which refers to the ideas, customs and social behaviour of a society. This will be essential to consider when reading contemporary academic sources that often employ the word *Kultur* in their debates (in particular the texts from *Anbruch*). In addition, Krois draws upon the work of Cassier, outlining his stance on *Kulturphilosophie* and how technology, which was considered *Zivilisation,* was weaving its way into *Kultur*. The dichotomies of *Kultur* and *Zivilisation,* or even *Kultur* and *Gesellschaft,* will play a crucial role in this thesis. It will underline the

[34] Kim H. Kowalke, 'Singing Brecht verses Brecht Singing: Performance in Theory and Practice,' in Bryan Gilliam eds. *Music and Performance during the Weimar Republic,* (Cambridge, Cambridge University Press), 74-93, 77.
[35] Brecht (1928), Trans Hinton, Strephen Hinton, Kurt Weill: *The Threepenny Opera,* 128.
[36] For more on the Brecht and Weill Partnership see: Kim H. Kowalke, 'Singing Brecht verses Brecht Singing: Performance in Theory and Practice,' in Bryan Gilliam eds. *Music and Performance during the Weimar Republic,* (Cambridge, Cambridge University Press), 74-93; Pamela Katz, *The Pertnership: Brecht, Weill, Three Women and Germany on the Brink,* (New York: Random House: 2015).
[37] Peukert, Detlev, *The Weimar Republic: The Crisis of Classical Modernity*, translated by Richard Deveson. (New York: Hill and Wang, 1989), 271.
[38] John Mihael Krois, '*Kulturphilosophie* in Weimar Modernsim,' 101-114.
[39] Ibid., 102.

ever increasing gap between academic and the so-called 'masses', assisting in the evaluation of contemporary academic text, and themes within Weimar *Zeitoper*.

Gordon and McCormick argue that the Weimar Republic was a crucible of intellectual innovation and modernism, where contemporary intellectuals were interdisciplinary in their studies.[40] Gordon and McCormick emphasise the importance of the intellectual classes and their influence on Weimar experience. This thesis will contribute further by adopting an interdisciplinary approach to case studies, especially in the analysis of *Anbruch.* The journal contains many interdisciplinary contributions by Weimar academics from various fields. This shows that musicology was a complex discipline, where interdisciplinary approaches were encouraged, reflected in the analysis of texts regarding radio. In addition these articles are reflected in the practical output of composers, thus contributing to the arguments made by Gordon and McCormick on the influences of the Weimar intellectual classes.

NEW MEDIA AND TECHNOLOGY

The Weimar Republic was abundant with machinery, from new media objects to the factory floor, technology was dominant in everyday life. As Richie states, 'Machines were no longer to be treated as dehumanising, but were to become an integral part of 'the-whole.''[41] This is apparent in artists' responses to the machine, some embraced the new technology and others reacted with caution. As well as new technology, new media was developing alongside traditional media and as discussed in the introduction, this created complex relationships and experimentation.

Technology in Weimar Art

A prime example of this was the Dada movement. Dada originated in Zurich and was a reaction to the irrationality of war and as a result its art was often satirical in nature. In 1920 an exhibition of 200 pieces of Dada work was exhibited in Berlin, which included works from Raoul Hausmann and Georg Grosz. Huyssen notes that 'in Dada, technology mainly functioned to ridicule and disseminate bourgeois high culture and its ideology, and this was iconoclastic value in accord with Dada's anarchistic thrust.'[42] The ethos

[40] Peter E Gordon and John P. McCormick' introduction, 'Weimar Thought: A Contested Legacy,' Ibid, 1.
[41] Richie, *Faust's Metropolis,* 335.
[42] Andreas Huyssen, *After the Divide: Modernism, Mass Culture and Postmodernism,* (Indianapolis: Indianapolis University press), ix, 11.

behind this was that by using technology for artistic purposes, it was liberated and thus undermined bourgeois society, as it appeared to invade all aspects of everyday life. Therefore, Dadaism attempted to reinvent the function of the machine. Furthermore, Huyssen highlights that technology not only infused the artists' imagination, but penetrated the work of art itself.[43] Thus, the machine became part of the production of art, not just a mere representation, which in itself stimulated debates, such as Benjamin's question of artistic aura when art is mechanically produced.[44] The idea of the machine as a producer of art is at the heart of this thesis, as the exploration of radio as a producer of opera will be examined in the analysis of *Malpopita.* This research will show the changing role of the machine in Weimar opera, where the penetration of technology in Weimar opera moves beyond the point of mere imitation, as portrayed in *Zeitoper,* where the radio is the producer, and thus *Funkoper* was born.

A key product of Dadaism was the photomontage, a collage of various cut up images fused together as one work of art. Photomontage artists such as Hausmann and Hoch, often portrayed images of the mechanised man and modern machinery.[45] Hoch's montages often showed images of liberated women, androgyny and women's direct experience of Weimar culture.[46] The montage, or collage technique was also present in *Hörspiel,* where sounds were collected and stuck together to create a dramatic piece. Vowinckel claims collage had a 'shock effect' and this is why it was used across the arts in the Weimar Republic.[47] Furthermore, Jelavich highlights the montage of machinery within Walter Ruttman's *Wochenende* (1927).[48] This was a collection of recorded sounds to represent the average weekend in Berlin, from the clock off sounds of Friday evening, followed by transport sounds to the country, and then back to the factory on Monday morning, this radio symphony is cluttered with mechanical sounds constructed to tell, as Jelavich argues, a 'non-narrative'.[49] The concept of montage along with the morphing of

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[43] Ibid, 9.
[44] Benjamin, *Work of Art in the Age of Mechanical Reproduction.*
[45] See: Matthew Biro, *The Dada Cyborg: Visions of the New Human in Weimar Berlin,* (Minnesota: University of Minnesota Press, 2009); Matthew Biro, 'The New Man as a Cyborg: Figures of Technology in Weimar Visual Culture', *New German Critique,* No.62, (Spring-Summer 1994), 71-112. JSTOR; Mark A. Pegrum, *Challenging Modernity: Dada between Modern and Postmodern,* (Berhahn Books, 2000); Dafydd Jones, *Dada 1916 in Theory: Practices of Critical Resistance,* (Liverpool: Liverpool University Press).
[46] Maud Lavin, 'Androgyny, Spectatorship and the Weimar Photomontages of Hannah Höch, *New German Critique,* No.51, (Autumn 1990), 62-86, JSTOR.
[47] Antje Vowinckel, *Collagen im Hörspiel*: *die Entwicklung einer radiophonen Kunst,* (Würzburg 1995), 14-15.
[48] Jelavich, *Berlin Alexanderplatz,* 81
[49] Ibid.

man and machine that is so clearly emulated by the Dada movement will also be key themes of the case studies of this thesis, as the operas all appropriate the montage technique and employ the use of the machine, both as props and vehicles of dramatic action. For example in Brand's *Maschinist Hopkins,* the machines are personified and devour the humans which they are meant to serve. The Bauhaus school, led by Walter Gropius, also incorporated the influence of the machine. Functional art was at the heart of the Bauhaus ethos, or to quote Scheinberg, the Bauhaus was the 'aestheticisation of function'.[50] Bauhaus architecture was iconic and acknowledged the need for social housing, presenting features such as vertical tower blocks and flat roofs. Expressionists and avant-garde artists were drawn to the Bauhaus, such as Wassil Kandinsky who was appointed onto the council in 1922, and these artists saw the Bauhaus teaching as an opportunity to make art a part of everyday life.[51]

Weimar Cinema

Cinema during the Weimar Republic, especially expressionist film, has been widely documented by film historians. For example Corey Ross states that cinematic breakthrough came after the First World War and cinema overtook most cultural activities in popularity, where Berlin had eight percent of Germany's cinemas.[52] As in art, expressionist cinema concentrated on psychological trauma and sharp, angular shapes in the scenery, and deep shadows in the lighting. An example of expressionist cinema is *The Cabinet of Dr Caligari* (1920). The film echoes the horrors of war, an abusive, authoritarian government and provides critique of the post-war world. The imagery in expressionist cinema was often surreal, horrific and nightmarish.[53] Additionally, Weimar cinema embraced technology and explored the concept of man and machine. This is most evident in Fritz Lang's *Metropolis* (1927), where workers are devoured by machines and a human cyborg figure leads workers to revolution. The film also comments on urbanisation and the role of women in the new Republic.[54] This iconic film will be

[50] Scheinberg, *Music and the Technological Imagination*, 17.
[51] Magdalena Dorste, *Bauhaus, 1919-1933,* (Berlin: Taschen, 2002) 24.
[52] Corey Ross, 'Mass Culture and Divided Audiences: Cinema and Social Change in inter-war Germany', *Past and Present*, No. 193, (November 2006), 157-195, 160-161.
[53] See: Lotte H. Eisner, *The Haunted Screen: Expressionism in German Cinema and the Influence of Max Reinhardt,* (Berkeley, University of California Press, 1973); Thomas Elsaesser, *Weimar Cinema and After: Germany's Historical Imaginary,* (Abingdon: Routledge, 2000): Thomas Elsaesser, *Weimar Cinema and After: Germany's Historical Imaginary,* (Abingdon: Routledge, 2000).
[54] See: Janet Lungstrum, 'Metropolis and the Technosexual Woman of German Modernity', in Katharina von Ankum eds., *Women in the Metropolis: Gender and Modernity in Weimar Culture,* (Berkeley: University of California Press, 1997).

essential in the analysis of Brand's *Maschinist Hopkins*, as Erica Scheinberg has highlighted, both portray similar themes and techniques in their personification and feminisation of the machine.[55] This will be expanded upon in the analysis of Brand's treatment of the machines in his implementation of 'invisible voices' in order to manifest this personification and feminisation.

Early Weimar cinema scholarship was dominated by the work of Siegfried Kracauer. His work venerates film as the greatest medium for reflecting a nation's mentality.[56] He argues that a history of early German cinema needs to be understood alongside Germany's psychological pattern, which is reflected in the methodology of this work.[57] What is most striking is Kracauer's argument that film is the most direct medium when reflecting a nation's mentality, meaning that film is never a product of an individual character, but cinema successfully addresses an autonomous multitude.[58] Hansen's observation of Kracauer's understanding of cinema shows that he viewed it as a symptomatic element within a larger heuristic framework and his analysis recognised the problems of modernity and how these struggles were being played out on screen.[59] She also notes that Kracauer saw film as a material expression and not just a representation of degeneration.[60] This is significant as it shows that Kracauer was considering the material properties of the medium as well as its content. Material qualities will be considered in this thesis, especially in the analysis of the radio scene in *Jonny*, which will also reflect Krenek's struggles with modernity, which is reflected throughout the opera.

Thomas Elsaesser explores German expressionist cinema, using specific case studies to examine key themes, techniques and actors.[61] Elsaesser aims to broaden the analyses of Kracauer and Eisner, whom he feels wrongly encourage the analogy of film culture and political history.[62] German cinema, he argues, was much more complex than a simple political mirror. He points out that Weimar cinema struggled with already established art forms and their social institutions, and the threat of Hollywood hegemony. In other words German cinema during the Weimar Republic was constantly striving for

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[55] Scheinberg, *Music and the Technological Imagination*, 98-130.
[56] Siegfried Kracauer, *From Caligari to Hitler: A Psychological History of the German Film,* (Princeton: Princeton University Press 1947).
[57] Ibid. 5.
[58] Ibid.
[59] Hansen, *Cinema and Experience*, 3
[60] Ibid, 8.
[61] Thomas Elsaesser, *Weimar Cinema and After: Germany's Historical Imaginary,* (Abingdon: Routledge, 2000).
[62] Ibid., 3.

cultural recognition and international success.[63] Comparatively, opera can be considered an established art form in the Republic, which often reflected social and political issues within the state.[64] *Zeitoper* in particular was a reflection of political and economic satire of which Kurt Weill perfectly described as a concave and convex mirror of society, exaggerating modernity in a comic and satirical fashion.[65].

Weimar Radio

23 October 1923 saw the first public radio programme which was broadcast from the attic of the *Vox* record company on *Potsdamer Straße*.[66] Classical music was played both live from a studio and from gramophone records. By the end of 1924 there were nine licensed firms which operated on a regional basis in line with local government, which included: Berlin (*Funk-stunde*), Leipzig (*Mitteldeutscher*), Munich (*Bayerischer Rundfunk*), Frankfurt (*Südwestdeutscher Rundfunk*), Hamburg (*Nordischer Rundfunk*), Stuttgart (*Suddeutscher Rundfunk*), Breslau (*Schilesische Funkstunde*), Konigsberg (*Astmarken Rundfunk*), Cologne (*Westdeutscher Rundfunk*), and the *Deutschte Welle* transmitted on a longer wavelength in order to reach the whole Reich. In 1925, the *Reichrundfunkverband* administered the affairs of these nine stations, which by July had purchased the majority of shares in German radio. A year later, the *Reichsrundfunkgesellschaft* took over control. By 1925, German radio had half a million subscribers, which increased to over three million by 1930.[67] There was no competition in Weimar radio as there was with cinema and the press, because it was administered by the federal postal ministry (*Reichspost*). Profits were restricted for broadcasting companies, which as Karl Führer notes, was a hybrid of capitalism and a profit restricting public enterprise.[68] This meant that the *Reichspost* decisively shaped the social structure of radio audiences until 1932 when radio became a public enterprise.[69]

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[63] Ibid, 5.
[64] For example of a study on opera as a political arena see: Mark Darlow, *Staging the French Revolution: Cultural Politics and the Paris Opéra 1789-17940,* (Oxford: Oxford University Press, 2012).
[65]Kurt Weill, 'Zeitoper,' *Melos 7,* (March 1928): 106-108, English Translation from: *Weimar Republic Sourcebook,* Jay, Kaes, and Dimendberg ed., (Berkeley: University of California Press, 1994), 573.
[66] Kate Lacey, *Feminine Frequencies: Gender, German Radio, and the Public Sphere, 1923-1945,* (Michigan: University of Michigan Press, 1996), 32.
[67] Hailey, 'Rethinking Sound: Music and Radio in the Weimar Republic,' 13-14.
[68] Führer, 'Medium of Modernity?' 728.
[69] For more on Weimar radio ownership and programming see: Joachim-Felix Leonhard, Horst O. Halefeldt, and Ludwig Stoffels, *Programmgeschichte des Hörfunks in der Weimarer Republik,* (Munich: Dt. Taschenbuch-Verl., 1997) which is a detailed history of programming an regional radio during the Weimar Republic. Also see: Helge Franz, *Rundfunk in der Weimarer Republik. Der Arbeiter-Radio-Bund,* (Norderstet, Germany: Druck und Bindung, 2006).

Early radio during the Weimar Republic required the listener to listen through headphones, which according to Rheding, even though the experience of listening was collective, the headphones made it an isolating experience.[70] In 1926, radio sets began to offer an integrated loudspeaker, which dramatically changed the experience of listening. Führer notes that this was not just a work of design history, but a work of social history as headphones confined the listener to sitting down, whereas with a loudspeaker they could do housework as they listened and listen together and discuss the radio programmes.[71] The two opera case studies, *Jonny* and *Malpopita* both were written and performed when a loudspeaker was available for radio listening, which is reflected in the presence of the loudspeaker in the hotel scene of *Jonny.*

Radio during the Weimar Republic was experimental in nature and aimed to offer a variety of cultural experience to its listeners. As Führer notes:

> [Radio] offered cultural events like concerts, opera, and lectures right in their parlours or sitting rooms, listeners should feel released from the 'exhausting restlessness' of modern life and so their house should become 'home', providing shelter not just from the rigors of the climate but also from the psychological perils of modern society, with its tendencies toward superficiality and anonymity'

Thus, radio, even though a product of modernity, also sought to distract the Republic from the crisis of modernity and act as a means of escape without having to leave their home. A key figure responsible for the technical and organisational founding of German radio broadcasting was Hans Bredow. Bredow began his career as an electrical engineer at *Gesellschaft für drahtlose Telegraphie,* and in 1917, he directed the radio war efforts on the Western Front. In April 1921 Bredow was appointed Secretary of State for Telecommunication and was also a member of the Conservative German People's Party. In 1926 he left the postal administration and became chairman of *Reichrundfunkgeschellshaft.* As a founder of German radio, Bredow claimed that radio connected households to the outside world and had the ambition to turn radio into a public sphere.[72] His vision of radio, which was shared by many of his contemporaries, was to educate the German population, and according to Führer, views radio as an 'apolitical instrument to spread culture.'[73] Initially the programmes contained highbrow musical and literary material, however as time went on programmers began to devote more time to

[70] Rheding, *Berlin Alexanderplatz,* 86.
[71] Führer, 'Medium of Modernity?' 773-774.
[72] Lacey, *Feminie Frequencies*, 30,33.
[73] Führer, 'Medium of Modernity?' 729.

popular music programming. Listeners' views seemed to be irrelevant to early Weimar broadcasters, who believed radio had a duty to shape cultural tastes.[74]

Kate Lacey offers a narrative of the role of women in German radio, as well as providing a broader history of the development of German broadcasting.[75] She explains the attempts at an apolitical approach to broadcasting during the early years, a policy of non-political broadcasts, where music broadcasts were key in the attempt to achieve neutrality. Lacey focuses on the relationship between women and radio during the Weimar Republic, discussing programming, the role of radio in women's lives, regional differences, and the changing experiences of women as the Republic developed. She incorporates economic and political factors into her discussion of how modernity shaped the early years of German radio. She defines Weimar radio as a 'public male medium' which was directed into the female private sphere.[76] She argues this by outlining specific programming for women, which includes the discussion of talks and advertising. The changing role of women during the Weimar Republic was reflected clearly in the arts. This will be shown in the analysis of Max Brand's *Maschinist Hopkins,* as the opera presents an example of the feminisation of the machine in the modern factory world.

In experimental radio scholarship it is the *Hörspiel,* or radio play, which is the most significant contributor towards German radio history narrative. According to Ryder, the term *Hörspiel,* did not gain a 'sure footing' in Weimar radio culture until 1929, despite being present in the early 1920s.[77] Gilfillan's work on German experimental radio omits Goehr's *Malpopita* from its analysis, but examines the *Hörspiel* in order to understand the conflicts between artistic experimentation and public demand.[78] The first *Hörspiel* was aired in 1924 and by 1926 600 works had been sent for adaptation by 280 authors.[79] The *Hörspiel,* like *Funkoper,* was drama composed specifically for radio performance, not simply adaptations of existing dramas, as was the *Sendespiel* (an example being the

[74] Peter Jelavich, *Berlin Alexanderplatz: Radio, Film and the Death of Weimar Culture,* (Berkerley: University of California Press, 2006), 62-64.
[75] Kate Lacey, *Feminine Frequencies: Gender, German Radio, and the Public Sphere, 1923-1945,* (1996).
[76] Ibid. 10.
[77] Robert G. Ryder, 'When only Ears are Awake: Günther Eich and the Acoustical Unconsciousness,' Florence Feiereisen and Alexandra Merely Hill ed. *Germany in the Loud Twentieth Century: An Introduction,* (Oxford: Oxford University Press, 2012), 36.
[78] Daniel Gilfillan, *Pieces of Sound: German Experimental Radio,* (Minneapolis: University of Minnesota Press, 2009).
[79] Johannes Schwamberger, *Das Hörspiel, Geschichte einer Kunstform,* (Hamburg; Diplomica Verlag, 2014).

planned radio adaptation of Döblin's *Alexanderplatz* in 1930 which never aired due to increasing Nazi influence on the airwaves).

The first *Hörspiel* that was broadcast was Hans Flesch's *Zauberei auf dem Sender: Versuch einer Rundfunkgroteske* or *Magic on the Air: An attempt at a Radio Grotesque* (1924).[80] The play depicted the difficulties of early radio broadcasting, where a magician slowly took over the radio station. Between 1924 and 1928 Flesch was a programme designer for *Süddeutsche Rundfunk*, where he showed a great interest in experimentation with the microphone. He was the first to attempt playing music at different times with a different microphone set up in rooms with varying acoustics.[81] His construction of *Zauberei* shows his detailed knowledge of radio, where the microphone was placed on stage and employed the montage technique was used. The listeners to this work were subject to an array of sounds including shouts, whispers and ghostly noises. Schwamberger observed that this was the first play in Germany which radio was the subject, and therefore it utilised the medium's techniques.[82] According to Gilfillan, this work aspired to theatrical engagement with artistic possibilities:

> The nature of artistic experimentation requires it to always stay one step ahead of the processes that seek to subsume it into the structures and patterns of the larger culture industry of entertainment economy.[83]

Zauberei allowed the radio itself to become the instrument, and draws upon the communication potential of the radio, a technique which is also used in Goehr's *Malpopita.*[84] This thesis will contribute to our understanding of early radio by showing how these techniques were also present in early composition for radio opera clearly showing parallels between *Hörspiel* and radio opera.

Existing scholarship on Weimar radio centres on the struggle between mass culture and the elite. For example, Jelavich and Ross have shown that the breakdown of Weimar radio audience was not an even distribution of classes. Jelavich states that the

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[80] F. H. Tebertius' *Anke* (1923) and Rudolf Gunold's *Bellizone* (1924), were early examples of *Hörspiel* which were never broadcast. See: Arnim P. Frank, *Das Hörspiel,* (Heidelberg: C Winter Universitätsverlag, 1963), 54.
[81] Schwamberger, *Das Hörspiel*, 11.
[82] Ibid.,13.
[83] Ibid., 70.
[84] For more on history of the *Hörspiel* see: Arnim P. Frank, *Das Hörspiel,* (Heidelberg: C Winter Universitätsverlag, 1963); Johannes Schwamberger, *Das Hörspiele, Geschichte einer Kunstform,* (Hamberg; Diplomica Verlag, 2014); Daniel Gilfillan, *Pieces of Sound: German Experimental Radio,* (Minneapolis: University of Minnesota Press, 2009); Antje Vowinckel, *Collagen im Hörspiel*: *die Entwicklung einer radiophonen Kunst,* (Würzburg 1995), 14-15.

middle class dominated radio audiences of the Republic and asserts that musical and literary programming was drawn from elite culture. [85] Jelavich affirms that German station directors found themselves with the task of selecting and scheduling works for a truly mass public, as the growth of the radio audience exceeded expectations, where Berlin had the largest share of audiences.[86] His narrative concentrates on radio programming, which includes the discussion of opera. There were 23 live performances of the Berlin State Opera between 1924 and 1926, in addition to 32 performances broadcast from Berlin studios, which were repeated.[87] This shows that opera played a part in Weimar radio's attempt to preserve high culture. Although this thesis is not concerned with operatic programming but with radio as a compositional tool, it is important to understand the role of opera within Weimar broadcasting as this provides context for the thesis.[88] For example, as this thesis will show, opera on the radio was present in the essays in *Anbruch* and Krenek's *Jonny spielt auf* presents a simulation of on operatic broadcast.

Following on from this, Lacey notes that Bredow was naïve in thinking that a non-political radio could exist in Weimar Germany.[89] She highlights that for the organised working class, the nondemocratic structure of radio was a concern, due to its state monopoly. In 1923 groups of workers united to form *Arbeiterradioklubs* (ARK). These clubs were created in order to give the organised working classes technical help in order for them to build their own radio and to provide alternatives from the bourgeois programs.[90] A union of these clubs was formed in 1924 and in 1926, the *Deutsche Welle* produced programmes specifically aimed at workers, yet these did not meet the expectations of the workers' radio clubs. Furthermore, Corey Ross has challenged the idea of radio as a mass medium during the Weimar Republic.[91] He argues that by the end of the 1920s, the gramophone and the radio were far from regular household items in the Weimar Republic.[92] Ross states that classical music dominated early sound recording.

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[85] Jelevich, *Berlin Alexanderplatz: Radio, Film and the Death of Weimar Culture,* (Berkeley, University of California Press, 2006).
[86] Ibid., 63.
[87] Ibid., 68.
[88] For more on music programming during the Weimar Republic, see: Karl Christian Führer, 'A Medium of Modernity? Broadcasting in Weimar Germany 1923-1932,' *The Journal of Modern History,* vol.69, no.4, (Dec 1997): 722-753, JSTOR.
[89] Kate Lacey, *Feminine Frequencies: Gender, German Radio, and the Public Sphere, 1923-1945,* (1996).
[90] Ibid, 36.
[91] Corey Ross, *Media and the Making of Modern Germany: Mass Communications, Society, and Politics from the Empire to the Third Reich,* (Oxford: Oxford University Press, 2008).
[92] Ibid., 128-129.

Like Jelavich, he concentrates on the poor quality of early sound recording and gives an account of early radio programming in the Republic, suggesting that it reflected middle class audiences and highlighting the dichotomy of education verses entertainment.[93]

Several radio historians have argued that radio was both a private and a public medium.[94] People listened to the radio in private, but real time broadcasting meant that it was also a collective experience. Ross declares that public listening was contained within and not across political borders.[95] Furthermore, Karl Führer's research emphasises Ross' argument here. He argues that radio broadcasting during the Weimar Republic should not be considered a mass medium. Like Jelavich and Ross, he states that the Weimar radio audience was dominated by the middle class, thus the working classes were under-represented.[96] Additionally, Führer's analysis of radio audiences challenges the concept of radio as a mass medium as 25% of subscribers were blue collar workers. Führer claims that this was due to the monthly radio licence fee being equal to the price of two cinema tickets or a record, so therefore the working class were less likely to purchase a set.[97] He also claims that working class families had to make sacrifices in order to purchase a set, and thus the working class were divided into radio or cinema/newspaper lovers.[98] Lacey also states that radio was a 'luxury item' and states that the introduction of radio came at a bad time economically.[99] The arguments presented here by these scholars must be considered in not only the analysis of *Anbruch*, but in Krenek's *Jonny*, where a simulation of a radio broadcast can be seen on stage and where the audience appear to be middle class. The analysis of their behaviour will add to these debates on radio and class during the Weimar Republic, as their behaviour not only mimics debates of modern scholarships, but those made by the intellectuals in journals such as *Anbruch.*

However, in contrast to Ross and Führer, musicologist Christopher Hailey believes radio in Germany was a tool for dissolving political borders and revolutionised concepts of space.[100] He also points out that radio served as a mediator of the moment and had a sense of mystery, where the listener was physically removed from the sound.[101] He draws

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[93] Ibid., 150-155.
[94] Ibid., 181. Also see: Kate Lacey, *Listening Publics: the Politics and Experience of Listening in the Media Age.* (Cambridge: Polity Press, 2013).
[95] Ibid., 183.
[96] Karl Christian Führer, 'A Medium of Modernity?' 737-738, JSTOR.
[97] Ibid,, 740-750.
[98] Ibid., 739.
[99] Lacey, *Feminine Frequencies,* 32.
[100] Hailey, 'Rethinking Sound: Music and Radio in the Weimar Republic,' 14 and 22.
[101]Ibid.

upon the radio broadcast of Schoenberg's *von Heute auf morgen* in 1930 (a mock *Zeitoper* using his famous 12 tone technique).[102] In his recount, Hailey quotes a letter from Schoenberg's daughter, in which she describes the radio as a magic box along with a few comments on its technical issues. This 'revolutionised' concept of space will be considered in the representation of radio on stage in Krenek's *Jonny* in its use of an off stage performer and in the analysis of Walter Goehr's *Malpopita.*

Zeitoper

The development of new media (cinema and radio in particular) meant that opera's place in society was vulnerable. The genre felt the pressures of a Republic in crisis, where audiences wanted to escape. Opera therefore, needed to adapt to popular audiences and appropriated new media in order to adapt to a new mass society. The mid-20s gave birth to a new genre of opera in Germany, which was called *Zeitoper. Zeitoper* was unique to the Weimar Republic, where the distinction between Expressionism and *Neue Sachlichkeit* was sometimes unclear. This is a clear example of the complex relationship between old and new media that Gitelman and Pingree refer to.[103] *Zeitoper* was a reaction to the so-called opera crisis in Germany during the Weimar Republic, a debate which this thesis will contribute to by the analysis of *Anbruch*. At the core of this 'crisis' was the issue of high art and its inability to engage with the masses which *Zeitoper* attempted to address. In *Zeitoper* there was an influx of technology on the stage. Typewriters, telephones, cars and trains were not simply props but became part of the musical sound. Jazz too influenced *Zeitoper,* and composers attempted to fuse the style with the operatic tradition, drawing on modernist techniques. Composers of *Zeitoper* included Ernst Krenek, Kurt Weill, Max Brand, Ernst Toch and Paul Hindemith. Hindemith's *Neues vom Tage* (1929) and *Hin und Zurück* (which was part of the Baden-Baden festival in 1927) both integrated modern media into the traditional operatic form. *Neues vom Tage* (or *News of the Day*) presents a couple who sell their divorce story to the press, in order to pay their legal fees, where according to Nussbaum, they become media constructs.[104] *Hin und Zurück,* (or *There and back*) on the other hand, mimicked cinematic techniques. The action unfolds and is then ordered into reverse by a sage, imitating a rewinding cinema

[102] Ibid, 23.
[103] Lisa Gitelman and Geoffrey B. Pingree eds., *New Media: 1740-1915,* (Massachusetts: MIT Press, 2003).
[104] Rachel, Nussbaum Wichert, 'Emotion and *Zeitoper* in the Weimar Era,' *Collegium: Studies across Disciplines in the Humanities and Social Scienes,* Vol. 19: Music and Emotions, (2010): 65-75, 69, JSTOR.

reel, as the music and dialogue play backwards. In Kurt Weill's *Der Zar lässt sich photographieren* (1927), a tango is played from a record, as the orchestra pit stay silent. The gramophone acts as a prop and is part of the musical performance, where the characters sing over the recorded music.

Scholarship of the *Zeitopern* from the Weimar Republic draws upon the use of technology and machines on the stage. For example Alexander Rehding's study of Kurt Weill's *Der Zar* pays particular attention to the use of the gramophone as musical accompaniment as opposed to the orchestra, which is the traditional accompaniment in operatic performance. [105] Rehding places the use of the gramophone into historical context by examining the development of the record and the gramophone before and during the Weimar Republic. Additionally, Rehding draws upon contemporary critical writings on the development of technology within the Weimar Republic. Amongst all musicological scholarship on *Zeitoper*, Rehding focusses the most on *Zeitoper's* relationship to the mass media. He states that *Zeitoper* had a fascination with the media and *Der Zar* goes beyond media imitation, as the record becomes part of the musical score and that the gramophone scene acts as a 'wormhole' of operatic tradition.[106] When opera is viewed as a multimedia art form as Hutcheon suggests, the gramophone scene from *Der Zar* can alternatively be viewed as a form of entangled media, as it deals with the idea of transmedial flows.[107] This is also reflected in other examples of *Zeitoper*, such as the radio scene from Krenek's *Jonny spielt auf.*

Rehding's focus on modern media within Weimar opera is again dominant in his exploration of the impact of radio on Weimar opera.[108] Here, Rehding states that the radio filtered its way into musical art in the Weimar Republic, and that the medium was unique as it was suitable for both progressive and traditional operatic projects in 1920s Germany.[109] This view of radio as a constructive influence on operatic performance is shown in his analysis of his case studies of opera which use radio as a prop on the stage: Strauss' *Die ägyptische Helena* (1928), Toch's *Der Fächer* (1920), and Krenek's *Jonny.* Rehding examines how radio technology is portrayed differently in each opera in terms

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[105] Rehding, 'On the Record,' *Cambridge Opera Journal*, vol. 18, no. 1, (March 2006): 59-82, JSTOR.
[106] Ibid., 81.
[107]Cronqvist and Hilgert, 'Entangled Media Histories: The Value of Transnational and Transmedial approaches in Media Historiography.' *Media History* 23:1: 130-141, http://www.tandfonline.com/doi/full/10.1080/13688804.2016.1270745.
[108] Alexander Rehding, 'Magic Boxes and Volksempänger: Music on the Radio in Weimar Germany,' in Nikolaus Bach ed., *Music, Politics and Theatre in Germany: 1848 to the Third Reich,* (Ashgate; Aldershot 2006), 255-272.
[109] Ibid., 260

of modernist composition and media fusion. In the opening of Strauss' *Helena,* the heroine is seen to be communicating with an omniscient shell, which Rehding states to be a symbol of a radio receiver, not as entertainment, but as a communication device. Helena is seeking information on her lover, but the voice from the shell appears somewhat cryptic. Rehding argues that rustling sea sounds which the shell produces (which come from the orchestra) could be interpreted as an imitation of the white noise of a radio set.[110] This seems to be the media imitation which Rehding refers to in his analysis of *Der Zar*, yet the radio is obscured and parodied, rather than directly imitated. His analysis of Toch's *Der Fächer* (a comedy set in Shanghai which portrays the contrasts between the mythical realm and the western world) describes the radio scene in this opera as a musical montage, which includes fading and interruptions.[111] The scene communicates radio's ability to transmit a variety of musical styles all over the world, which according to Rehding, is in contrast to Strauss' attempt in *Helena* to reveal the bourgeois characteristics of radio.[112] His comments on *Jonny* however, appear more brief, asserting that the use of radio in this *Zeitoper* show radio's acceptance and appropriation of romanticism.[113] Rehding's analyses and comparisons of the use of radio in Weimar opera create the foundations for this thesis. His research demands a deeper analysis of the relationship between the two media during the Weimar Republic, which is addressed in this thesis not only by the analysis of radio on the stage, but in the examination of *Funkoper* and its impact on both the experience of opera and radio. Rehding's claim of the use of media technology within opera as beyond imitation suggests that its presence should not be dismissed, but rather the relationship between media technology and opera should be explored. Even though Rehding concentrates on the use of radio on the stage, his argument clearly implies a relationship between opera and radio, by presenting a clear awareness of the new medium held by contemporary composers, in terms of its physical properties and its communication and entertainment characteristics. This thesis therefore, will continue the work of Rehding by analysing the compositional techniques in the representation of radio on stage as well as its aesthetics, and expand further by examining opera written specifically for radio.

[110] Ibid., 261.
[111] Ibid., 262.
[112] Ibid., 263.
[113] Ibid., 266.

AMERICANISMS IN WEIMAR CULTURE

New media, such as cinema and radio contributed to the discussions around modernity and played a role in promoting American culture. These new media attracted new audiences and their development helped to form the idea of 'mass-culture'. Like most of Europe, the Weimar Republic was subject to influence from America, which manifested themselves in Weimar culture and can be described as Americanisms. As Hansen has pointed out, the discourse of Americanisms in Weimar culture, should not be conflated with the historical process of 'Americanisation', which is the transfer of American-style business practices in Germany, such as the Fordian/Taylorist methods of production.[114] Americanisms then, are influences from American culture which are present in the Weimar Republic; the absorption of its ideas, philosophies, and capitalist structure in everyday life and cultural output, showing transnational entanglements within Weimar modernism. This absorption was present in music, opera, cinema and cabaret. The ideas associated with the metaphor *Amerika,* as Hansen points out, range from standardisation, rationalisation, calculability, efficiency, speed, assembly line, mass consumption, freedom from traditional hierarchy, and the new woman.[115] Richie describes this fascination as Germany wanting to become an extension of America in Europe.[116] This is supported by Hansen's claim that the American social regime of modernisation was in competition with European versions of modernity.[117] The Americanisms within German culture will now be explored, beginning with the most profound Americanism during the Weimar Republic, jazz.

Jazz developed as a post-war American phenomenon, introducing new instruments and the new freedom of improvisation, and was derived from the African-American blues culture. Yet Weimar jazz was far removed from authentic African-American jazz. This was mainly to do with the lack of jazz recordings in Germany until the mid-20s and only a small fraction of American jazz musicians (which included Sam Wooding and the Chocolate Kiddies) actually visited Germany.[118] To Germany, America was a symbol of modernity and jazz was the soundtrack to this new world and according to Marc A. Weiner, jazz was an acoustical sign of national, social, rational and sexual

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[114] Hansen, *Cinema and Experience*, 40.
[115] Ibid.
[116] Richie, *Faust's Metropolis,* 338.
[117] Hansen, *Cinema and Experience*, 40.
[118] J. Bradford Robinson, 'Jazz Reception in Weimar Germany: in search of a Shimmy Figure', Brian Gilliam eds., *Music and Performance during the Weimar Republic,* 107-133, 115

differences.[119] German Composers sought to combine the popular jazz sound with art music, which will be explored in the analysis of Krenek's *Jonny*, in which Krenek presents a caricature of African American jazz.

The reception of jazz by Weimar critics was very mixed. Cook draws upon Alfred Baresel's use of the phrase 'Jazz as deliverance' in the journal *Auftakt* (1926) and states that Germans considered America as the driving seat of modernity and regarded it a ruler of the new post-war age.[120] This suggests the Germany saw jazz a means of escape from the realities of the Republic. Where Expressionism and *Neue Sacklichkeit* reflected the horrors of life so garishly, jazz offered people an alternative means of escape, a way of forgetting and a glimpse of a positive future. Weimar critics had varied responses towards jazz. For example, Weiner has observed the importance of jazz in Weimar literature.[121] He associates jazz as music of the 'other' in Weimar Germany. He refers to Adorno and his contemporaries, attempting to understand what he believes to be Adorno's main arguments: Jazz was a musical emblem of blacks, Jazz was dangerous, and it constituted a vehicle of emancipation.[122] Weiner concentrates on the hostility he believes Adorno had towards jazz, both German *and* American and he believes some musicologists tend to ignore this. Robinson on the other hand, attempts to offer new perspectives on Adorno's jazz essays.[123] In contrast to Weiner, he believes that Adorno did not recognise that he was criticising a *German* jazz, rather than authentic African American jazz. Therefore his jazz essays should be read within a Weimar popular music/commercial context, and that Adorno's written jazz essays come after the fall of the republic (1933-35).[124] Robinson's interpretation of Adorno's key ideas centre upon the myth of black jazz, jazz as a false utopia, and the limits of its technical features.[125] He appears to believe that Adorno considered jazz as a representation of popular music in a commercial Republic. The fact that jazz during the Weimar Republic was not necessarily a representation of American

[119] Marc A. Weiner, Urwaldmusik and the borders of German Identity: Jazz in Literature of the Weimar Republic', *The German Quarterly,* Vol 64, No. 4, (Autumn 1991), 475-487, 475.JSTOR.
[120] Susan C. Cook, 'Jazz as Deliverance: the Reception of Jazz in the Weimar Republic', *American Music,* Vol. 7. No. 1, (Spring 1989): 30-47, 30. JSTOR. 30-31.
[121] Marc A. Weiner, '*Urwaldmusik* and the Borders of German Identity: Jazz in Literature of the Weimar Republic,' *The German Quarterly,* vol.64 no.4, (Autumn 1991): 475-487, JSTOR.
[122] Ibid., 483.
[123] J. Bradford Robinson, 'The Essays of Theodor Adorno some Thoughts on Jazz Reception in Weimar Germany', *Popular Music,* Vol.13 No.1, (January 1994), 1-25, JSTOR.
[124] Ibid., 1-2.
[125] Ibid., 2.

jazz must be considered in the analysis of the music itself *and* its contemporary criticism, as it will provide context for both its construction and reception.

J. Bradford Robinson believes that the so-called Jazz age was a creation of the Weimar media. [126] His discussion draws upon the foreign nature of jazz within German musicology, and asserts that opera was the most stimulated by jazz, using Krenek's *Jonny spielt auf* as an example.[127] Robinson claims that due to limited access to American sources, Germans were more likely to have heard Krenek's *Jonny* as opposed to what was considered authentic American jazz, which did not change with the development of radio.[128] This 'German Jazz' scene then was what popular culture imagined America to be, often exaggerated and a fantasy. This is supported by Peter Tregeor's judgement of Jonny as a caricature of an African American.[129] This shows that Germany created its own exaggerated version of jazz, which was reflected by its cultural output.

Jazz had a profound influence on the Weimar Cabaret scene during the Weimar Republic. Like many art forms in the Republic, Cabaret was present in Germany before the First World War and it originated from the concept of the English variety show. Diversity was abundant in the Weimar nightclub scene. Peter Jelavich, whose research focusses on popular cultural forms, has provided a detailed analysis of Berlin cabaret, placing it within the context of Weimar cultural studies.[130] He defines Cabaret as a combination of music, satire and dancing in an intimate nightclub setting. Jelavich also explores the politics behind the cabaret curtain and cabaret's relationship with intellectual life. He argues that the cabaret scene was metropolitan, drawing upon early modern culture's fascination with the variety show.[131] Jelavich suggests that cabaret had a complicated place within Weimar ethos as it fell between the elite arts and popular culture, linking cabaret to the Dada movement.[132] Even though this study focuses on Berlin, Jelavich never implies that Berlin represents wider Weimar Cabaret; on the contrary, his writing indicates that Berlin's cabaret scene was unique and extremely

[126]J. Bradford Robinson, 'Jazz Reception in Weimar Germany: In search of a Shimmy Figure,' Ibid., 107-134.
[127] Ibid., 108.
[128] Ibid., 116.
[129] Peter Tregeor, ''Stadtluft Macht Frei': Urban Consciousness in Weimar Opera,' in Nikolaus Bacht ed. *Music Theatre and Politics in Germany: 1848 to the Third Reich,* (Aldershot: Ashgate, 2006).
[130] Peter Jelavich, *Berlin Cabaret,* (Cambridge, Mass: Harvard University Press, 1993).
[131] Jelavich also highlights the origins of German cabaret were in the British variety show from the 19th Century. Ibid, 10-35.
[132] Ibid., 144-147.

complex, challenging the stereotypical nostalgic view of cabaret which popular history so often constructs.

Alan Lareau proposes that revues were both a means of escape *and* a place for coming to terms with a new environment.[133] Like Jelavich, Lareau signifies cabaret's state of limbo in Weimar culture, in showing the dilemma created by its nature of interceding between public tastes and artistic ideals.[134] He implies that cabaret became outdated by the late 1920s, and consequently, attempts were made to modernise it, which included the addition of cinematic techniques.[135] These attempts to modernise cabaret in order to bring it up to date with an ever evolving society is similar to the attempts made by the opera composers discussed in this thesis. Opera, like the variety show, was an established medium within Germany before the Republic was formed, so both media had to adapt to a changing society and the integration of mass media such as radio and cinema.

Cinema too was subject to American influence. As Hansen points out, it was the implementation of the Dawes Plan in 1924 that 'ushered in at once a large scale campaign of rationalisation and the consolidation of Hollywood's hegemony in the German market.'[136] This is supported by Thomas Saunders who argues that even though Germany had an established film industry, America had direct control of forty percent of the German feature film market.[137] Saunders claims that Hollywood became a medium for communicating the American message in Germany. According to Saunders, Hollywood represented the erosion of traditional boundaries between culture and commodity.[138] Kracauer laid the foundations for this argument when he observes the 'decline' of German film, yet recognising that these 'Americanised' films were in themselves true expressions of German life.[139]

It is clear from the discussion so far that Americanisms had an impact on media and mass culture in the Republic. The debates show that German art was imitating jazz idioms in opera, film, radio and cabaret and a 'German jazz' was emerging. The presence of this 'German jazz' in opera shows that *Zeitoper* was subject to transnational influences which it crudely imitated, rather than an outright absorption of American characteristics,

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[133] Alan Lareau, 'The German Cabaret Movement during the Weimar Republic,' *Theatre Journal*, vol. 43, no. 4, (December 1991): 471-490, 474, JSTOR.
[134] Ibid.
[135] Ibid., 480-483.
[136] Hansen, *Cinema and Experience*, 40.
[137] Thomas J. Saunders, *Hollywood in berlin: American Cinema and Weimar Germany*, (Berkeley, University of California Press, 1994), 10.
[138] Ibid., 11-12.
[139] Kracauer, *From Caligari to Hitler*, 4.

thus jazz, like radio, is a prop in Krenek's *Jonny.* The analysis of Krenek's *Jonny* furthers this argument by offering new perspectives on the radio scene, highlighting how the simulation of a radio broadcast treats both opera and jazz, both in terms of composition and audience reception. Americanisms are also present in Brand's *Maschinist Hopkins,* where jazz is used in celebration and to emphasise the cinematic qualities of the opera, creating allusions to Hollywood. The observations about jazz in this thesis highlight its identity as a sonic signpost to America when imitated in Weimar opera.

MASS CULTURE AND ARTISTIC IDENTITY

Discourses on 'the masses' and so-called 'mass culture' appear to be a recurring theme within Weimar cultural studies, both in modern academia and Weimar sources. Whether in an atmosphere of post war gloom, or the collective economic struggles of the early 20s or the depression of 1929, or even the fascination with the American continent, it is clear that modern historians have adopted an image of 'mass' or 'popular' culture when examining the early 20th Century, especially when discussing the relationship between society and media. Weimar academics also noted the concept of the collective. In *The Mass Ornament,* which was published in the *Frankfurter Zeitung* in 1927, Kracauer describes a so-called mass movement in terms of collective bodies, using examples such as tiller girls, which express the representation of machines and masses within capitalism.[140] He explores the distractions in which members of the middle class immersed themselves. His examination of the commodity of leisure time reflects upon the notion of the factory line of production.

Debates around mass culture, especially in the German context, must consider the concept of *Kitsch.* The use of this term amongst critics has often been negative, however Huyssen has identified the blurred boundaries between *Kitsch* and high art:

> Not every work of art that does not conform to canonized notions of quality is therefore automatically a piece of Kitsch, and the working of Kitsch into art can indeed result in high quality works…The boundaries between high and low art have become increasingly blurred, and we should begin to see that process as one of opportunity rather than lamenting loss of quality of failure and nerve.[141]

[140] This essay can be found in: Sigfried Kracauer, *The Mass Ornament: The Weimar Essays,* translated by Thomas Y. Levin, (Cambridge, Massachusetts: Harvard University Press, 1995). The original essays were published by Suhrkamp Verlay in 1963.
[141] Huyssen, *After the Divide: Modernism,* ix.

The use of *Kitsch* in Weimar modernism is evident. Not only did composers adopt jazz and cabaret ideas in their works, but modern technology and media integrated themselves into opera, and more specifically *Zeitoper*. Richard Taruskin's translation of *Zeitoper* to 'now-opera' differs from most scholarly interpretations as an 'opera for the time'.[142] Taruskin asserts that 'now-opera' was not simply a reference to current events and popular culture. He states that its main 'novelty' was the clash between the ephemeral content and the 'classical' form. [143] It did not therefore portray a new world, but a new fairy tale/allegory, which is why Taruskin coins 'now-opera' as a work of *kitsch*. Taruskin draws upon the pied-piper nature of *Jonny*, the alluring other, where his emphasised 'otherness' unravels the very premise of 'now-opera'.[144] Yet the composers of the *Zeitoper* were engaging in academic circles and were the pioneers of modernism. For example, Hindemith and Krenek both experimented with the twelve tone technique and studied at music conservatoires. Furthermore, Hindemith, Krenek and Weill all wrote essays on music, engaging with academic debates on modern music. They were also involved in the media and jazz industries; Hindemith worked in the radio department in Berlin *Höchschule für Musik* and Weil wrote numerous reviews for *Der Deutsche Rundfunk.* The influence of jazz and media are abundant in *Zeitoper,* and indeed many of these composers' works during the Weimar Republic. This reflects Huyssen's comment on the blurred lines between high and low art. By exploring key composers and their contributions to *Anbruch*, this thesis will argue that entanglements appear to emerge in cultural production. This the relationships between mass culture, *Kitsch* and high art are crucial in the analysis of the case stidues.

Huyssen's work on the avant-garde and mass culture highlights mass culture's dependency on technology:

> Mass culture as we know it in the west is unthinkable as well as technologies of transportation (public and private), the household, and leisure. Mass culture depends on technologies of mass production and thus on the homogenisation of difference.[145]

Thus, mass culture not only exists because of technology and media, but is dependent upon it for its survival. Huyssen also highlights the relationship between high art and

[142]Taruskin, 'The Golden Age of Kitsch,' 256.
[143] Ibid.
[144] Ibid., 258
[145] Ibid 9.

mass culture, emphasising the work of the Frankfurt school and the culture industry is key in understanding mass culture. Existing scholarship has shown how the question of culture was key to contemporary intellectuals. This thesis will further add to this debate by showing how the ideas of the Frankfurt School also permeated *Anbruch*, whose contributors were clearly influenced by critical theory.

In order to further understand academic hostility towards mass culture, it is important to understand the impact that the economy had on university life, especially the arts. Bernd Widdig, highlights the power of inflation and the impact it had on German culture.[146] He outlines the causes and events of inflation by describing its phases, arguing that the long term effects of inflation and hyperinflation were psychological rather than economic and political, leading to trauma and humiliation. This psychological damage is reflected in popular memory and cultural output. He points out that the devaluation of money began in Germany as early as 1914.[147] Like Gay, Widdig challenges the notion that the Weimar Republic created new phenomena, but it merely liberated or intensified what already existed during the First World War, which was particularly true in the case of inflation. He also challenges the popular images associated with Weimar inflation (such as the wheelbarrow heaped with money) by drawing attention to those who appeared to benefit from the devaluation of currency. For example farmers, lower income groups and large companies were the winners of inflation.[148] A group which Widdig highlights as the 'losers' of inflation is the academic community. He dedicates a chapter to the decline of academic status during inflation in Weimar Germany, where he draws upon contemporary academic sources in order to emphasise the distress of these intellectuals. This so-called distress over inflation within the intellectual classes, as outlined by Widdig, centres on academic status and the role of *Kultur* in the modern world of capitalism, rather than the psychological turmoil of the modern man.

Further, Benjamin Goose suggests mass culture sparked a debate within musicology about artistic integrity.[149] His thesis explores the concept of 'mass culture' and modernity, attempting to grasp opera's complex place with 1920s German culture. Goose refers to the growth of mass entertainment, defining the masses as the unknowable

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[146] Bernd Widdig, *Culture and Inflation in Weimar Germany*, (University of California Press; Los Angeles 2001)
[147] Ibid., 36.
[148] Ibid., 51.
[149] Benjamin Goose, *Opera for the Masses? Opera and Mass Culture during the Weimar Republic*, (PhD Thesis; Royal Holloway University of London, 2005).

other, where opera mostly occupies a middle class domain.[150] He asserts that criticisms of mass culture made by music critics did not necessarily match the real experience, essentially implying they were living in their own academic bubble. This provides researchers with a warning on the limitations of these sources. Goose shows the benefits of the analysis of non-academic sources when studying opera's complex place in Weimar mass culture, showing how opera and its critical language, evolved significantly during the Weimar Republic.[151]

Widdig and Goose are echoed by Riche as she argues that left-wing artists and intellectuals were 'out of touch' with the average Berliner. These artists claimed to make art for the masses, yet this was not the reality and the workers remained unmoved by the art carried out in their names.[152] She highlights the struggle of the artist in modern Berlin and that they were often left behind: 'Some were bitter that the old life of the mind had been pushed out by the new life of the cultural producer, but most Berliners accepted the change'.[153] This bitterness is clearly linked with the argument of inflation highlighted by Widdig. Mass culture or cultural production was further isolating the artist and created an anxious consciousness. This is perhaps most noticeable in Krenek's autobiographical portrayal in *Jonny*. Max represents the intellectual struggling to cope with the modern world, where pressures of mass culture threaten his artistic integrity. This is emphasised further by Drew's comment on Krenek, highlighting the pressure on academics and artists of the Republic:

> I have a feeling that when the history of music in our time comes to be written, Krenek will be seen as its classic victim. A composer of quite exceptional gifts and rare intelligence…yet nothing ever quite comes from the musical heart – only from the worried artistic conscience. So it is with Jonny, the conflict is there but not solution.[154]

This anxiety is present in Widdig's argument, and is also reflected in artistic output and must be considered when examining sources by Weimar critics. This will contribute in understanding the hostility of academics to emerging popular culture during the Weimar

[150] Ibid,, 13-14.
[151] Ibid., 13.
[152] Richie, *Faust's Metropolis*, 345-346
[153] Ibid, 333
[154] David Drew, 'Musical theatre of the Weimar Republic', Proceedings of the Royal Musical Associaltion, 88th Sess. (1961-1962), pp.89-108, 100. JSTOR

Republic, which will be of particular relevance to the discussion of Weimar musicology and the representation of Max and the hotel guests in Krenek's *Jonny*.

The idea of worried artistic consciousness is also present in Huyssen's argument where he bluntly highlights the dichotomy between modernism and mass culture:

> As modernism hides its envy for the broad appeal of mass culture behind a screen of condescension and contempt, mass culture, addled as it is with pangs of guilt, yearns for the dignity of serious culture which forever alludes it.[155]

This 'envy' often reveals itself in the artefacts and publications of modernism, and again is clear in Krenek's *Jonny*, where Max struggles to cope in a world of mass culture, both on an artistic and personal level. Jonny on the other hand is obsessed with stealing an Amati violin, an exquisite item of high culture. The opera ends with Jonny triumphant, standing on top of the world with the violin, where Max has renounced his modernism and embraces mass culture. Therefore, this conflict between modernism and mass culture is key in the analysis of this thesis, as it will assist in understanding not only the case studies, but also the broader relationship between opera and radio during the Weimar Republic.

The Weimar opera crisis was shaped by concerns of mass culture formed by the intellectual elite. Moritz Föllmer attempts to challenge the perceived relationship between crisis and modernity in Weimar Germany, by understanding the diverse meaning of 'crisis', and it's no direct connection with culture and politics, as Peukert suggests.[156] This is significant when attempting to understand the so-called opera crisis in 1920s Germany; the 'crisis' of opera was not only due to politics and the economy, but was also influenced by the insecurities of composers, which resulted in opera's adaptation to new technology and its appropriation of new media. In other words, there was more to the *Opernkrise* than the audience's preference for cinema and the affordability of the theatre, but was rooted in artistic insecurity.

In contrast, Taruskin argues that the invention and wide distribution of sound film during the Republic had a profound influence on opera and was a contributor to its state of crisis. According to Taruskin, movies became the operas of the twentieth century, leaving opera houses with a museum repertoire and with specialised audiences. The advent of sound film meant that 'opera found its pre-eminence as a union of the arts

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[155] Huyssen, *After the Great Divide,* 16.
[156] Moritz Föllmer, 'Which Crisis? Which Modernity?' Gordon and McCormick ed., *Beyond Glitter and Doom,* 19-30.

compromised and its standing as the grandest of all spectacles usurped.'[157] Taruskin's view of *Zeitoper* as operatic suicide, is more of a reflection of the desperation of opera during the Republic, rather than a comment on his personal taste. His discussion highlights the ability of film to transport the audience and preserve romanticism, whilst drawing upon examples of opera which were adapted to film during the early twentieth century (for example the career of Erich Wolfgang Korngold and his adaptations of operatic music for the screen). Despite his analysis of *Jonny,* Taruskin overlooks the role of radio in his reasoning for his disappointment in *Zeitoper,* his concentration is on cinema and records. If radio were considered, perhaps this would add new perspectives to his criticisms of *Jonny* and entanglements between these media would begin to show, rather than viewing them as separate, mutually exclusive entities. This research then, aims to expand upon Taruskin's work and concentrate on radio influence on the opera crisis, its representation and transformation into radio opera, rather than adaptation of existing works.

In her exploration of *Jonny,* Nanette Neilsen concentrates on the dichotomy of high and low culture, which she argues is represented in the symbolic expression of the main characters of Jonny and Max, '*Jonny spielt auf* contributed to the wider discourse that led many Weimar intellectuals in the late 1920s and early 1930s to warn against the power of mass culture.'[158] Her article clearly echoes Drew's comments on Krenek, where she labels the so-called 'worried artistic consciousness' as the 'problem of freedom', where popular culture is a false freedom, represented by Jonny, with whom serious artists like Max cannot compete. This suggests that Nielsen believed that 'serious' artists were oppressed during the Weimar Republic, unable to express their true selves in a society fascinated with popular culture, and artists compromised their artistic integrity in order to fit in with the new age. She concludes that Krenek attempted to highlight this in *Jonny,* yet failed to present a solution to the problem and the true message of the opera was buried by Jonny and his jazz music.

As well as *Zeitoper,* the operatic collaborations of Brecht and Weill are also embedded in the debates around mass culture. Their first collaboration, *Mahagonny* began as a song-cycle which the two wrote for the 1927 Baden-Baden festival (it was

[157] Richard Taruskin, 'The Golden Age of Kitsch,' in Richard Taruskin, *The Danger of Music and Other Anti-Utopian Essays,* (Berkeley: University of California Press, 2008), 241-260, 246.
[158] Nanette Nielsen, 'Ernst Krenek's 'Problem of Freedom' in *Jonny Spielt auf,' Twentieth Century Music,* 10, 25-57, 27.

performed alongside Hindemith's *Hin und Zurück* and Ernst Toch's *Der Prinzessin auf der Erbse*). The full opera version premiered in Leipzig in 1930, which was interrupted by organised protests by Nazi sympathisers. *Mahagonny* presents the audience with Marxist philosophy and the harsh realities of modernity. In the programme for the 2015 *Royal Opera House* performance of the opera, Terrell Carver states that *Mahagonny* presents the illusion free trade and worker migration will a promised land.[159] Lydia Goehr has described *Mahagonny* as the last culinary opera, referring to the culinary demand of operatic seduction, meaning its pleasures and satisfaction.[160] She claims that its culinary character is explicit through classical forms, spoken pieces, film projection and social contradictions.[161] Goehr points out that *Mahagonny* pursues pleasure yet maintains a sober aspect as it was a product and response to a society that became controlled by consumption.[162] She claims that the opera replaces metaphor with realism and the Americanisms within the work place the opera on the border of serious and popular music.[163] Additionally, Padmore highlights that *Mahagonny* demonstrated the immoralities on which real society is based.[164] This shows the difference between epic opera and *Zeitoper,* as its raw content and popular music makes meant epic opera was more relatable to audiences and criticisms were not cryptic, by obvious and often grotesque.

Der Dreigroschenoper, or *The Threepenny opera,* is another of Brecht and Weill's epic operas, which premiered in 1928 at the *Theatre am Schiffbauerdamm* This opera was successful, as shown by the number of new productions during its first season which exceeded fifty. By 1933 there was a recorded 130, many of them abroad, including New York and Paris and after the first performance of the opera, the *Schiffbauerdamm* theatre hosted 250 consecutive performances of the work. The Opera was adapted for sound film by Pabst in 1930 and was recorded in German, French and English. By 1932 a company on Broadway had bought the opera and it is by far the most remembered and revived opera of the Weimar Republic. *Die Dreigroschenoper* is an adaptation of John Gay's English Ballad Opera, *The Beggars Opera* (1728). The opera revolves around the

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[159] Terrell Carver: 'Accumulate! Accumulate!' *Rise and Fall of the City of Mahagonny,* (London, Theatre Programme from the Royal Opera House, March 2015), 10-15, 15.
[160] Lydia Geohr, 'Hardboiled Disillusionment: Mahagonny as the Last Culinary Opera,' *Cultural Critique,* no.68, (Winter 2008): 3-37, 9, JSTOR
[161] Ibid., 12.
[162] Ibid., 12, 14.
[163] Ibid., 22, 23.
[164] Padmore, 'German Expressionist Opera,' 45.

character Mackheath, who is a notorious criminal and womaniser, who manipulates and seduces various characters. The opera pushed the boundaries of tradition as it cast cabaret singers rather than opera singers, set the orchestra on the stage and used film projections.

Stephen Hinton has studied this work and its premiere has beed discussed alongside contemporary analysis and criticism.[165] Additionally, the political content of the opera has also been discussed, where the leftist ideologies have been identified.[166] In his own analysis of the work, Brecht claimed that even though the music for the work is new, the essence of the story reflects the 18th Century, thus the social order in which virtually all strata of the population follow moral principles, do not live in this code, but live off it.[167] Here, Brecht is criticising the idea of totalitarian morality, which is presented clearly in the character of Mackheath, as his behaviour is immoral, yet the audience and characters are seduced by him. Furthermore, Adorno's texts argued that *Dreigroschenoper* parodied opera and operetta in its blunt adaptation of jazz, where other forms merely attempted to modernise and refine it.[168] This is a clear reference to the composers of the *Zeitoper* and their attempts to intellectualise jazz. Adorno praised the opera for its portrayal of art's ability to unmask the coziness of bourgeois life, and discover its demonic root, which is what opera must do. Where the *Zeitoper* presented caricatures of jazz and cabaret, epic opera absorbed them in order to present the audience with a mirror, no longer concave or convex, but showing a harsh representation of reality.

In radio there was a distinction between 'serious' and 'light' music, where 'serious' music seemed favoured by the radio programmers, yet audiences seemed to prefer 'light' music, such as jazz. Brian Currid attempts to understand the acoustic culture of Weimar and Nazi Germany, with a distinct emphasis on popular music.[169] Currid recognises the minimal attention given to radio within musicology, emphasising how it is often discussed within elite musical practices.[170] He refers to the *Schlager* (hit song), film and Gyspy songs. Currid outlines the importance of music in radio, and asserts that Weimar radio did not facilitate a democratic mass publicity. His discussion provides insight into the importance of popular music and how it should not be underestimated by

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[165] Stephen Hinton, *Kurt Weil: The Threepenny Opera,* (Cambridge: Cambridge University Press, 45).
[166] See: Richard J. Salmon 'Two operas for Beggars: A Political Reading,' *Theoria: A Journal of Social and Political Theory,* no. 57 (1981): 63-81. JSTOR
[167] Brecht (1928), trans. Hinton, *The Threepenny Opera, 122.*
[168] Adorno (1929), Trans. Hinton, *The Threepenny Opera,* 130.
[169] Brian Currid, *A National Acoustics: Music and Mass Publicity in Weimar and Nazi Germany,* (Minneapolis University of Minnesota Press, 2006).
[170] Ibid., 5, 13.

musicologists and media historians. The concept of nationality feeds into Currid's argument that popular music played a significant role in acoustic publicity, drawing particular attention to the *Schlager*. Not only did it feature on the radio, but also in advertising and print culture, and therefore a specific mode of musical publicity. Currid states that the *Schlager* showed that music was not a public event, but it served to inaugurate the event of a public, where the idea of 'public' was infinite and imagined.[171] The relationship between popular music and the media highlighted in Currid's research must to be extended to the so-called 'elite musical practices', or in other words, opera. Currid also states that 'serious' forms of music found their way into popular structures of listening in Weimar and Nazi Germany.[172] The relationship between 'popular' and 'serious' music then, will assist in understanding the significance of the *Zeitoper* and its entanglement with new media during the Weimar Republic.

Todd Avery discusses these issues in relation to British radio. Avery emphasises the gap in media scholarship in the study of modernist attitudes towards radio. Tod Avery has focused on the Bloomsbury group (which included writers such as Woolf, Keynes, Forster, and Strachey) and their complex relationship with the BBC during the interwar period in Britain. [173] He argues that the mission of the BBC was technological, political and committed to the preservation of culture. He concentrates on Reith's religious and moral mission for the new medium and the central role which radio played in the modernists efforts of the Bloomsbury group, stating that radio was to be the means of asserting (or reasserting) social unity and common culture through the revival of an atrophied spiritual sensibility.[174] The idea of domestication of culture suggests radio's nature of dissemination, where the subject of dissemination must be determined. Reith aimed to promote a moral Britain with Christian foundations, whereas the Bloomsbury group challenged the BBC's cultural politics. The Bloomsbury group, like Brecht, saw radio as a medium of communication and its potential to spark intellectual debate within its audience. Both these moral and cultural intentions by the BBC and the Bloomsbury group suggests that (even if some of its members may have denied it) an attempt was made in British broadcasting to reach the so-called 'middle', in order to shape the cultural tastes of the nation. As noted by Doctor, German radio pushed the boundaries of

[171] Ibid., 81.
[172] Ibid., 17.
[173] Todd Avery, *Radio* Modernism: *Literature, Ethics and the BBC 1922-1938*, (Aldershot; Ashgate 2006).
[174] Ibid., 23.

modernism in its music programming. This is shown by the broadcast of Schoenberg's 12 tone opera, *Von Heute auf Morgen,* on Berlin radio in 1930.[175] The BBC on the other hand, chose to broadcast Schoenberg's *Gurrelieder,* a much more tonal and conventional piece which would appeal to a traditional classical audience.

CONCLUSION

In order to contextualise the case studies, this chapter has considered the cultural and historical debates around the Weimar Republic. It has highlighted gaps in current research regarding opera and radio during the Weimar Republic. To begin with, it has identified the move within modern scholarship towards a broader view of the Republic, thus acknowledging that considering Berlin as a microcosm for Weimar culture is problematic and provides a narrow view of Weimar experience. Therefore, in the analysis of Weimar culture, it is essential to be cautious of nostalgic representation of Berlin and understand its significance as a unique cultural experience compared to the wider Republic. This thesis aims to implement this by firstly recognising that new operas were often premiered and performed outside of Berlin on a national, trans-border and trans-national level. This is particularly true of Krenek's *Jonny,* which premiered in Leipzig and was performed in Vienna, Prague and America. Secondly, the analysis of *Anbruch,* a Viennese journal with both Austrian and German critics, will show a cross border relationship between artists and critics, where Berlin was just one of the many cities in which they were active.

The debates regarding modernism highlight, as argued by Gay, that the Weimar Republic did not necessarily create new art forms, but liberated techniques which were already present. It was the horrors of war, political and economic crisis, and modernity which lead to further experimentation with these techniques which resulted in a more emphasised expression of modernist practices, such as the twelve tone technique and expressionist painting. The Weimar Republic was subject to a broad range of stimuli, thus the discussion of modernism highlighted the diversity within artistic expression during the Weimar period and showed that artefacts often overlapped artistic borders, thus Weimar modernism was complex in nature. This thesis explores the relationship between opera and radio, but is informed by an entangled media histories approach, this means it is important to note these entanglements between art forms and to not pigeon hole a certain artefact to a specific genre. What will be more appropriate would be to examine

[175] Cook, *Opera for a New Republic,* 182.

the case studies as examples of entanglements of Weimar modernism and thus identify influences of Expressionism, *Neue Sachlichkeit*, *Kitsch*, America and so on, in order to recognise relationships between influence and artefact. Furthermore, the dynamic exchange between Expressionism and *Neue Sachlichkeit* (especially during the early years), questioned the role of the artist verses performer/mediator. The analysis of the case studies will reflect this by identifying aspects of modernism, paying particular attention to compositional techniques, and understanding the relationships between artist, performer and media. Thus analysing the impact of radio technology on the ability to communicate opera and artistic message, both in terms of prop and producer. The examination of Weimar modernism underlined the idea of functionality, which was especially true in the *Neue Sachlichkeit* movement. The function of art verses the autonomy of art must be carefully considered, especially during the discussion of media and technology. By considering the function of opera and its vast influence from various Weimar art movements, this thesis will identify opera's evolving relationship with radio during the Weimar Republic, with specific relation to *Zeitoper* and *Funkoper.*

The Weimar Republic was also subject to the transnational influence of America, resulting in the presence of Americanisms in culture and everyday life. The debates regarding these Americanisms highlighted the presence of jazz within Weimar art, both in popular media and opera, which gained a mixed response amongst Weimar critics. The 'authenticity' of jazz during the Weimar Republic has also been questioned, thus often labelled as 'German' jazz. Robinson's acknowledgement of opera being the art form that was mostly influenced by jazz is significant to this thesis. The analysis of Krenek's *Jonny*, will show how Krenek constructed a caricature of jazz in order to present a critique of the Americanisation. The influence of jazz will also be present in Brand's *Maschinist Hopkins* and Goehr's *Malpopita*, highlighting once more the range of influences which opera was subject to during the Weimar Republic. The acknowledgement of Americanisms is important, as America was a transnational influence on Germany, which in turn will contribute to the observations of entanglements within the case studies.

Technology and media are also key to this thesis. The debates on technology show how the machine was a huge influence in both everyday life and the arts. Artists were constantly attempting to re-invent the function of the machine. Weimar scholarship has identified the integration of media within *Zeitoper* as props on the stage as media imitation, with the exception of Rheding, who notes that the use of the gramophone in Weil's *Der Zar* goes beyond media imitation as it becomes part of the sound. This

research therefore, aims to build upon Redhing's analysis and view the use of radio within *Zeitoper* as entanglement and *Funkoper* as a work of trans-media. The idea of montage is another key concept of Weimar modernism and will be reflected in the case studies, showing the diversity and overlaps of style in Weimar opera. Furthermore this research will expand upon the research of Erica Scheinberg, whose analysis of Brand's *Maschinist Hopkins* identifies the personification and feminisation of the machine. This thesis will offer new perspectives on the compositional techniques in this opera, showing how the treatment of the voices of the machine set the stage for a new genre of opera, the *Funkoper.*

Finally, this chapter has explored debates around mass culture and artistic consciousness in relation to Weimar culture. Widdig's analysis of inflation showed that university funding was cut and highlights the distress of the academic community, which must be taken into consideration when analysing academic texts from the period, especially in regards to popular culture. The debates on mass culture also show the blurred boundaries between high and popular art, which will be a key contributor to the analysis of the case studies, especially the analysis of *Anbruch.* The discussion showed that due to emerging mass culture, and especially cinema, the relevance of opera was questioned, thus exposing its vulnerability, which must be considered in its analysis as this will assist the understanding of its experimentation and relationship to technology and media.

This review has not only identified key debates within Weimar historiography in relation to this thesis, but highlighted gaps in knowledge and ideas which demand expansion. Research on German experimental radio contains rich discussions on the history of Weimar radio, gender, programming, ownership and the *Hörspiel*, has thus far neglected Walter Goehr's *Malpopita.* This *Funkoper* is a key artefact in both opera and radio history and its analysis will not only provide researchers with new information, but also expand upon the debates discussed in this chapter. This thesis therefore will present the first full analysis of Walter Goehr's *Malpopita,* drawing upon its construction, themes and its characteristics of *Funkoper*. Furthermore, the current scholarship of Krenek's *Jonny* fails to identify the significance of the radio scene and its portrayal of radio discourses. The analysis of *Jonny* therefore will provide a detailed investigation of the scene, its construction and its representation of radio. This will assist in showing the development and changing attitudes of radio within Weimar musicology and show the journey of radio from *Zeitoper* to *Funkoper*. This research aims to adopt an interdisciplinary approach by analysing the case studies from both musicology and media

history perspectives. The analysis of *Anbruch* will show that musicology during the Weimar Republic was influenced by other disciplines, and thus its analysis must also take the same approach. Viewing *Zeitoper* through the lens of media history will offer new perspectives and provide deeper dimensions in order to understand radio's journey from prop to producer in Weimar opera.

Chapter 2

Changing Attitudes in Weimar Musicology towards Radio: An Examination of the Journal *Musikblätter des Anbruch*

This chapter focusses on the modern music journal, *Musikblätter des Anbruch,* which was shortened in 1929 to *Anbruch.* Firstly, it will present the journal and its contributors, introducing networks and entanglements in cultural production. It will then present an overview of broader Weimar musicology in order to show that the journal reflects wider debates from the Weimar Republic, as its contributors were well known critics and composers who were active in Germany in the 1920s and early 1930s. The discussion will then focus on key themes within *Anbruch* regarding opera and radio: Music and the machine, Music on the radio, Opera and radio, and Music for the radio. The articles discussed span from 1926 to 1931, as this reflects the time period of the thesis, from Krenek's *Jonny* to Goehr's *Malpopita.* The analysis of the journal will pay particular attention to the special issue of 1926 on mechanical music, and Frank Warschauer's column, *Musik und Technik,* a special column which appeared in the 1929 editions of the journal, which served as a pivotal point for the changing attitudes towards radio in *Anbruch*. This chapter then, will lay the foundations in explaining the rationale of Krenek, Brand and Goehr in their practical output, their use of radio in Weimar opera, not only in terms of their understanding of the new technology, but their awareness of audience behaviour in the new age of mass culture. It will show how their operas appear to reflect the arguments presented in *Anbruch,* and mirror the changing attitudes towards the potential of the use of radio technology away from mere reproduction to production.

INTRODUCTION TO *ANBRUCH*

Anbruch, was an Austrian modern music journal which ran from November 1919 to December 1937.[1] The journal contains a mixture of articles, reviews and columns. Initially twenty volumes were printed annually, but from 1922 these morphed into ten

[1] The entire PDF collection of scanned articles of the original print from this journal is available to purchase as a Cd Rom: *Musikblatter des Anbruch Monatsschrift für moderne Musik. Geleitet von Dr. Paul Stefan 1919-1937 Faksimile-Ausgabe Auf CD-ROM,* CD Rom, (Universal Edition, 2001).

double issues, and from 1923 between six and nine issues were published annually, each with one, two, or three numbers. The journal appears to develop over the course of the Republic and display the changing attitudes within musicology, when examining the journal from its beginning to end, it becomes clear that it reflects the changes in the debates within musicology during the Weimar Republic, as well as the political climate of 20s and 30s Germany and Austria.

Anbruch's contributors consisted of many well-known Austrian and German musical personalities from the 1920s and 1930s. These personalities included Bekker, Krenek, Weill, Hindemith, Warschauer, Flesch, Adorno and Schoenberg, whose backgrounds varied. For example Krenek, Weill and Hindemith were predominantly composers, yet Weill had experience in the film industry and Hindemith worked in the radio department in the *Berliner Höchschule für Musik*. Whereas Warschauer and Flesch predominantly worked in radio; Warschauer a critic who worked in radio production and Flesch who worked on various *Hörspiel* projects. Adorno was primarily a sociologist/musicologist but he also had experience in composition. Furthermore, many of the journal's contributors were students of Schoenberg, Schreker or Berg. Throughout this chapter, similar connections will be observed, highlighting entanglements between these contributors and their respective industries, thus showing how these relationships helped shape further understanding of radio music amongst academics during the Weimar Republic.

In 1919 the journal was split into three parts: 'General', 'Specialist' and 'Commentaries'. The 'General' section dealt with the musical climate, appealing to the musical amateur of the middle class, as it was more philosophical than technical. The 'Specialist' section dealt with specific pieces and composers, and the 'Commentary' section, which was written in columns, containing shorter critiques and letters from a variety of contributors. These sections ceased to be labelled when Paul Stefan took over the journal in 1922. Following this there were lists of new musical works and academic books. The final pages of the journal were dedicated to advertisements, which consisted of upcoming concerts, recordings and books. The journal also dedicated issues to specific contemporary composers. For example the first issue of 1920 was dedicated to Franz Schreker, an Austrian composer and teacher who taught many of the journals contributors, such as Krenek and Adorno. The articles discuss the composer's life, personality, music, and his opera *Irrelohe* (1924). Additionally, in 1921 an issue was dedicated to Busoni, an Italian composer who was a close friend of Schoenberg, which

included a discussion about the presence of Goethe in his work. In the early '20s the journal also considered foreign music, such as music in Czechoslovakia, America, England, Russia, Sweden, Japan and China. *Musikblätter des Anbruch* also printed new sheet music for readers to perform themselves at home. For example in May 1922 Webern's *Der Tag ist Vergangen* (op.12) was printed at the end of the issue. This was scored for voice and piano, so easy to reproduce in the domestic environment.[2]

Despite its status as a contemporary music journal, *Anbruch* also gave great attention to pre-war composers and ideas, which is particularly noticeable in the early publications. For example, Mahler was a prominent figure in the early issues and was presented as an idol for post-war German and Austrian composers. There was also attention given to musical performance and particular establishments, which included the Vienna Symphony Orchestra, various opera houses and music in particular cities (For example Vienna, Berlin, Dresden). The variety of content shows that Austrian and German critics each had different perspectives towards music during the inter-war period. Germany concentrated on the experimental, and what can be considered a more academic form of composition, whereas in Austria, and in Vienna in particular, critics concentrated on its musical establishments, tradition and performance excellence. Andreas Giger's work on the role of the Vienna state opera in the inter-war years highlights the importance of tradition and musical institutions in inter-war Austria.[3] He states that the Austro-German relationship after their defeat had a critical impact on the definition of Austrian tradition.[4] Even though the Treaty of Versailles forbade the two nations to join officially, Vienna was in many ways an unofficial extension of the Weimar Republic, especially in terms of culture and academia, yet their attitudes towards contemporary post war music differed. For example, Austrian critics saw clear distinctions between north and south German music. According to Giger, the north was associated with depth and intelligence, where the south was somewhat freer with its voice leading and more traditional, and Viennese music was seen as the epitome of south German music.[5] Thus, *Musikblätter des Anbruch* presents a hybrid of inter-war German and Austrian thought. The journal contains a large number of essays on modern music, but also contains articles boasting of institutional excellence and nostalgia towards past composers, which is particularly

[2] Anton Webern, 'Der Tag ist vergangen,' *Musikblätter des Anbruch*, (1922/9-10): 163.
[3] Andreas Giger, 'Tradition in Post-World-War 1 Vienna: The Role of Vienna State Opera,' *International Review of the Aesthetics and Sociology of Music*, vol.28. no. 2, (Dec 1997), 189-211, JSTOR.
[4] Ibid., 191.
[5] Ibid., 193.

apparent during its early years. For example, this can be seen in 1923 when it published an issue dedicated to the music of Salzburg. This included specific articles regarding Austrian music and its influence in wider Europe, contemporary Austrian composers, Austrian music in Berlin and the Bach festival. Issues like this emphasise the Austrian excellence in performance and their national pride.

During the mid-1920s *Musikblätter des Anbruch* published numerous special issues. These covered a wide variety of topics such as Jazz, mechanical music, specific composers, dance, and opera. Examples include: *Arnold Schoenberg on his 50th Birthday* (August/September 1924), *Russia* (March 1925), *Dance Today* (March/April 1926), *Music and Machine* (October November 1926), and *Opera* (January 1927). These issues recognised the increase of machines in everyday life, both at work and in the home and discussed the stimulation of the machine and its perceived threat to composers. For example, the critic H. H. Stuckenschmidt who, as shown later, had a multiple links with composers of the avant-garde, which included a collaborative set of concerts of the *Novembregruppe* in 1927-28, was drawn to the machine and the debates it created. He contributed to the special issue *Music and Machine* and wrote the *Mechanical Music* column until Adorno took over in 1929. When Adorno took over, he changed the direction of the column towards consumers rather than producers, which was how Stuckenschmidt had previously run it. Adorno claimed that it should be a column that gave technical advice and musicological criticism.[6] His specific interests leaned towards radio and its potential for modern music production.

Adorno's work for *Anbruch* can serve to inform a greater understanding of his later work on critical theory and (what is often perceived as) hostility towards popular culture. Adorno's writings and their analyses are some of the most debated works within musicology. Thomas Y. Levin has argued that Adorno was interested in the debate about popular culture and technology early on in his career. This, he states, was already evident in his largely overlooked involvement with *Anbruch.*[7] Adorno began contributing to the journal in 1925, when he was introduced by Alban Berg, and in 1929 he was invited onto the board of directors.[8] Adorno's first task was to propose a new organisation of the journal, which included its change of name. The journal went from *Musikblätter des*

[6] Thomas Y. Levin, 'For the Record: Adorno on Music in the Age of its Technological Reproductivity, *October*, vol.55, (Winter 1990): 23-47, 28, JSTOR.
[7] Ibid., 26.
[8] Ibid.

Anbruch to simply *Anbruch.* Furthermore, Adorno called for a broader scope in academic material, this included the recognition of *Kitsch* and light music, as they were not necessarily what they claimed to be.[9] Levin argues that Adorno's view of *Kitsch* was more complex than it appeared. He surmises that *Kitsch* is not modern, but reactionary, therefore an object of great importance.[10] Adorno was not arguing that popular music had strong artistic substance per se, but rather stating that it was worthy of discussion and noting its reactionary nature. Therefore in April 1929 a volume of light music was published. This issue comprised of articles on operetta, Cabaret/revue, *Schlager* (popular song), film music, salon bands and entertainment on the radio. This is the first issue fully dedicated to light/popular music and acts as a pivotal point for the journal's change of direction. It is noteworthy that the advertisements at the end of the issue seem to promote what can be considered more 'serious' concerts and recordings. For example Alban Berg's *Wozzeck,* and works by Brahms, Tchaikovsky, Dvorak, Krenek and Max Brand, which are presented alongside the light music advertisements. This is more than likely an attempt to uphold the integrity of the journal and to highlight the difference between serious and light music. The acknowledgement and discussion of live music is important, but the presence of serious music shows the reader that the journal is still 'serious' and 'academic'. This change to more a futuristic view of musicology can also be seen in Frank Warschauer's writing in *Musik und Technik* in 1929. He Identified radio as a form of musical production and highlighted the 'suffering of sound', meaning the diminishing quality of broadcast music due to its technical capabilities. Warschauer noted that critics were judging radio's capabilities on its current standards, rather than its future potential, these articles will contribute to a considerable portion of the analysis in this chapter, showing a turning point in attitudes of Weimar musicologists towards radio.

After the fall of the Republic in 1932, *Anbruch* altered its content. During the mid-30s the journal made several references to the rise of National Socialism. The journal was forced to change its publisher, *Vorwärts-Verlag,* and to eliminate the subtitle 'Journal for modern music', which changed to 'Austrian music journal'. Its focus switched to historical musicology, where articles included information on new findings on Beethoven, Schubert and Bach. This shows the full circle of musicology from the end of the First World War to the rise of National Socialism, showing that musicology, as well

[9] Ibid., 27.
[10] Ibid.

as practical output, was a unique discipline during the Weimar Republic. The National Socialists took pride in Germany and Austria's past and wanted to promote it, just as in the early issues.

Anbruch provides a vital case study for this thesis as it contains numerous articles on music and the machine, radio and opera. Not only do these articles discuss these topics in a highly critical way, but represent both German and Austrian musicological attitudes, and providing a trans-border perspective. Before these themes can be explored however, this chapter will give an overview of Weimar musicology, and introduce the work of Paul Bekker in order to place *Anbruch* within a wider academic context and show that the journal can indeed be viewed as a microcosm for Weimar musicology.

WEIMAR MUSICOLOGY

Musicology was a significant yet complex discipline in Weimar Germany. Like modern musicology, Weimar scholarship was not simply a matter of practical output (performance and composition), but an established academic field, discussing social and aesthetic discourses in both historical and contemporary music. The Weimar approach to musicology predates the Republic to the 19th Century, where composers and philosophers wrote in depth on musical aesthetics. For example, Richard Wagner's extensive essays discussed music's place in society and its ability to evoke emotion and stir up revolution, which musicologists and historians continue to cite today.[11] As Lajosi points out, Wagner expressed his ideas in theoretical writing as well as his art.[12] In a similar fashion, musicology during the Weimar Republic was grounded in aesthetics and philosophy, which often outweighed the technical score analysis. Weimar musicology was often concerned with the function of music in society. It was a rare occurrence to encounter a score example in an article, what was more common were detailed, metaphorical descriptions, which alluded to nature and critical theory, contemplating the very being of the music.

The First World War had a profound impact on Austrian and German musicology. As Potter notes, musicians were effected by traumatic wartime experiences, which bred

[11] See Richard Wagner, *Opera and Drama,* translated by Willian Ashton Ellis, (Nebraska: University of Nebraska Press, 1995), (Originally published in Germany, 1851); Richard Wagner, *The Artwork of the Future and other Essays,* translated by William Aston Ellis, (Nebraska: University of Nebraska Press, 1993), (Originally published in Germany, 1849); Richard Wagner, *Judasim in Music and other Essays,* translated by Willian Ashton Ellis, (Nebraska: University of Nebraska Press, 1995), (Originally published in Germany, 1850).
[12] Lajosi, *Wagner and the (Re)mediation of Art,* 42.

a unique form of German musicology.[13] The reparations imposed by the Treaty of Versailles meant that existing inflation lead to hyperinflation and the German economy became extremely fragile. As highlighted in the previous chapter, Widdig discusses the decline of academic status during inflation in Weimar Germany, drawing attention to the fact that University funding was cut and it was difficult to purchase foreign journals.[14] Also, the devaluation of money resulted in a decrease in the pay gap between professors and labourers. Left-wing intellectuals claimed this was a logical consequence of capitalism, as material creation was seen to be more valuable that philosophy and theory.[15] According to Peter Franklin, there was certainly an underlying fear in the academic community; a fear of societal enthusiasm spoiling the so-called 'true art'.[16] As the years went by, however, critical attitudes changed and academics began to embrace jazz and popular culture, acknowledging its value within the academic sphere, which can be seen in journals like *Anbruch*. Musicologists were active in the popular press, writing regular columns and reviews, in order to spread their ideas beyond academic journals.

There were however, clear divides and long term debates between musicologists, for example, the Bekker Pfitzner debate. Pfitzner believed that the composer should have no outside influences, just his inner most feelings, whereas Bekker was keen to translate music into dramatic and metaphorical descriptions.[17] Both sides of this debate are visible in the pages of 1920s music journals such as *Melos* and *Auftakt*, and of course, *Anbruch.*[18] This section will now focus on Bekker's side of the debate as his discussion of opera is particularly applicable to this thesis.

Paul Bekker's work provides an excellent source as it provides essential insight into Weimar musicology, especially when examining Weimar opera. His book written in 1935, *The changing Opera,* provides an overview of the so-called opera crisis in the Weimar Republic, in which opera attempted to bridge the gap between 'serious' and

[13] Potter, 'German Musicology and early Music Performance 1918-1933,' 95.
[14] Bernd Widdig, *Culture and Inflation in Weimar Germany,* (University of California Press; Los Angeles 2001).
[15] Ibid, 181-182.
[16] Peter Franklin, 'Audiences, critics and the Depurification of Music: Reflections of a 1920s Controversy,' *Journal of the Royal Musical Association,* Vol.114, No.1, (1989), 80-91, 80, JSTOR.
[17] Ibid., 83-84.
[18] *Melos* was a German music journal (published in Berlin) which was printed between 1920 and 1934. It was founded by the conductor Hermann Scherschen and its main focus was to discuss the relationships between modern music and society. *Der Auftakt* was a music journal that was printed in Prague between 1920 and 1938.

'popular' music, in order to re-affirm itself within modern culture.[19] He writes on the decline of music in opera:

> Opera is viewed more and more as a play which more or less incidentally makes use of a song and music style – determining laws evolved from the raw material of opera have fallen so completely into oblivion that finally they ceased to be believed at all.[20]

Even though Bekker wrote this text after the Republic had dissolved, he is referring to his contemporaries and their output during Weimar Germany. Bekker believed that composers of opera were historically minded, merely imitating the past without a true understanding of the functionality of opera. He stressed that a successful composer must be a singer and the sound of the 'living voice' must permeate through the very foundation of the work. Bekker argued that modern composers could not meet this demand, thus resulting in 'symphonic' and 'song operas', meaning that the voice was not always optimised to its full dramatic potential. His description of opera from the 1920s and 1930s suggests that the opera crisis meant more than the dwindling of its audiences, that the crisis went beyond the German public simply preferring cinema or cabaret to the opera house; the problem was rooted in composers' lack of understanding of the significance of the human voice as the foundations of an operatic work. This fascination with the human voice can also be seen in Bekker's earlier text, *The Story of Music,* where he attempts to describe the history of music as a cycle of transformations.[21] Here he argues that the new music would represent the unified intensity of a vocally conceived tone.[22] Bekker is suggesting then, that German modernists were primarily concerned with tone, and in particular the distinctive quality of vocal tone. At a glance, it seems as though Bekker is contradicting himself in these two texts, but this is not the case. He does not mean that composers were not aware of the significance of vocal tone, but were incapable of its application, with the key problem being mere representation of vocal styles, rather recognising the voice as a natural force in its own right. This is epitomised so clearly in many Weimar *Zeitopern,* where the influx of technology, jazz influences and satire often eclipsed the fundamental vocal line, creating a montage of styles and characteristics,

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[19] Paul Bekker, *The Changing Opera*, translated by Aurthur Mendel (London: J.M. Dent & sons, ltd., 1936), 259, (Original published in America, 1935).
[20] Ibid., 282.
[21] Paul Bekker, *The Story of Music: An Historical sketch of the Changes in Musical Form*, Translated by M.D Herter Norton and Alice Kortschak, (New York: W. W. *Norton* & Company, Inc., 1927).
[22] Ibid., 267.

rather than powerful operatic form with secure vocal foundations. Bekker refers to Krenek's *Jonny* as the first big operatic success of the generation, stating that:

> This was due to the cleverness with which it combines familiar operatic types, a vocal style inclined towards that of the operatic, and dance gesture characteristics of the time.[23]

This demand for the realisation of the voice as the driving force of opera is emphasised in the genre of radio opera and is certainly reflected in Goehr's *Malpopita.* Radio technology forced Goehr to strip opera down to its bare bones; the vocals and musical accompaniment. Not only was the visual stage of busy modern life omitted here, but the limitations of early radio technology meant that orchestral capabilities were restricted. Therefore a smaller orchestra was essential, giving the opera the opportunity to emerge fully from vocal conception, without the distractions of the *Zeitoper*. Bekker was certainly not alone in his concern for the 'crisis' which opera found itself in during the Weimar Republic. Many of his contemporaries also wrote about this issue.

MUSIC AND THE MACHINE

Mechanical music or *Mechanische Musik,* refers to representation of machines in music as well as mechanical instruments. During the Weimar Republic, machines were working their way into everyday life and consequently appeared in cultural output and publication. For example the machine could be seen and heard in Fritz Lang's *Metropolis* (1927). The business of everyday life was depicted in Hindermith's *Kammermusik* (a series of chamber pieces written1921-1927) and machines were also present in *Zeitoper,* appearing as props on the stage as well as becoming part of the sound. So it is not surprising then, that in October 1926, *Anbruch* published a special issue called *Musik und Maschine.* This issue was devoted to the discussion of music and modern technology, which included gramophone records and radio. Paul Stefan, an Austrian music historian, introduced the issue citing Paul Kammerer's law of series.[24] This refers to the seemingly random coincidences of events taking place within a relatively short space of time. In the same year the musicology journal *Aufktakt,* which was based in Prague, published a similar special issue. Stefan pointed out that *Anbruch* announced their title first and he hopes that they will have something new to say.[25] This is not only a competitive comment or a joke

[23] Bekker, *The Changing Opera,* 282.
[24] Paul Stefan, 'Musik und Maschine,' *Anbruch,* (1926/8-9): 343-344, 344.
[25] Ibid.

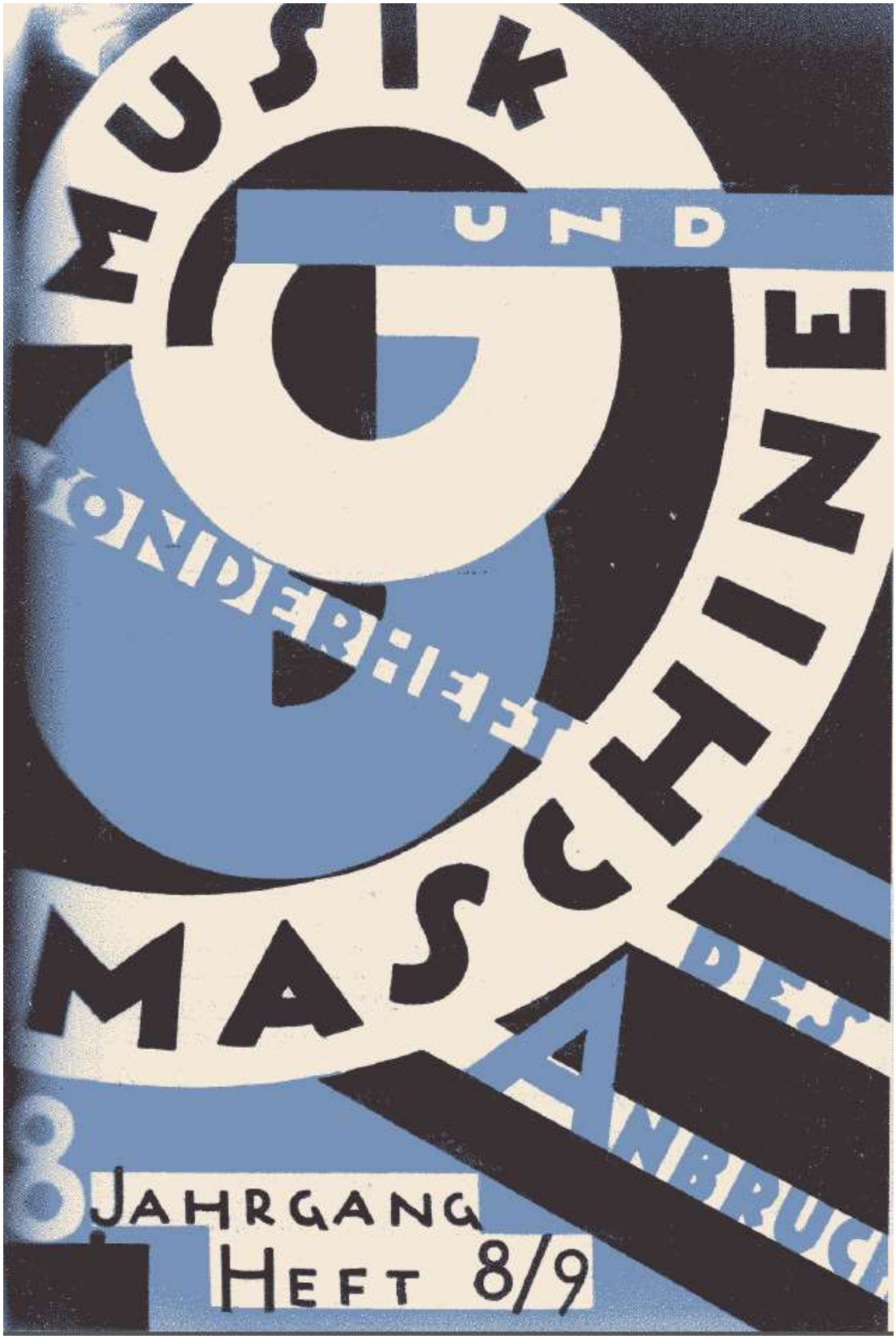
at *Aufktakt's* expense, but is a reflection of German musicological attitudes in Weimar Germany. Stefan's opening evokes an air of superiority and clearly expresses that this issue, even though it discusses machines and media, is a prestigious work of musicology, therefore highlighting the intellectual approach of German musicology during the ‘20s and ‘30s. Stefan then states that the problem with mechanical music is its urgency; meaning people turned to immediate things for stimuli. He argues that the emotional form of music was lost in the Weimar generation, so music was mechanised, not just by its production and reproduction, but in its very essence of being. This observation is important when analysing music and technology from this era, as it assumes that the construction of music was influenced by the machines which were communicating it. Stefan writes:

> Die Probleme der neue Machinerie, sie sind zu erörten; wie produziert, wie reproduziert man für sie, was kann sie dem Hörer, was dem Schüler bieten, welche Aufgaben sind einer Kunstpolitik hier ganz neu gestellt?
>
> The problems of the new machinery are to be debated: how is it produced, how is it reproduced, and what can it do to the listener and what can it offer the scholar, what are the tasks of artistic policy?[26]

The questions which Stefan presents here were new to the academic community, but had to be considered when examining the new technologies at their disposal. Stefan is not just introducing the debates of this special issue here, but highlights the key debates of this thesis, as this research addresses how these problems were presented on the stage in Krenek's *Jonny* and how they were overcome in Goehr's radio opera *Malpopita.*

Figure 1: *Front cover from ‘Musik und Maschine’, special issue of Musikblätter des Anbruch (1926/8-9).*

[26] Ibid.



Another contributor to this special issue was H. H. Stuckenschmidt, a German composer and musicologist who worked with the composer Max Butting, on a series of modern music concerts in Hamburg in 1927-1928. Erica Schienberg has studied

Stuckenschmidt's essays, emphasising his view of mechanisation as a solution to the imprecision of the live performance of music, his creative approach to mechanical music (meaning music performed by a machine or by mechanical instruments such as the player piano or the Theremin), and his view of the gramophone as a means of disseminating of music.[27] In other words, the machine (recorded sound or mechanical instrument) has the potential to close the gap between composer and performer, narrowing the possibility for subjective interpretation in favour of absolute performance. Stuckenschmidt's article on mechanisation in the special issue highlights the two reactions to technology of composers during the Republic: those who were fighting the machine and those who exaggerated it.[28] He indicates that concern for the machine does not necessarily mean that it as a threat, but rather recognition of the fact that humans are replaceable by more precise, cheaper and efficient mechanics, so consideration of the machine is vital and it should not be overlooked. Stuckenschmidt is referring to the machine in terms of performance here, and its ability to reproduce exact performances and the elimination of interpretation problems. He adopts a balanced view on the machine and its future in musical production, stating it as a simple tool rather than a god or devil which his contemporaries suggest. He also writes:

> Bedarf es der Erwähnung, daß wir noch am äusertsen Beginn einer Epoche stehen? Einer Epoche allerdings, die man später einmal aus die wichtige in der neueren Musikgeschichte betrachten wird.
>
> It is needless to say that we are still in the beginning, standing at the outermost beginning of a period. In a period certainly which one will later consider as the most important in modern music history. [29]

This view of the technology is a clear trend in this special issue, where contributors discuss the new technology without fully understanding the technical aspects. Its purpose was to begin to iron out the methods of mechanical music and to highlight strengths and weaknesses of the new technology. In *The curves of the Needle,* Adorno challenged Stuckenschmidt's use of the term 'mechanical music' in relation to 'talking machines', which he used in both the special issue in *Anbruch* and *Auftakt.*[30] By this, Adorno meant the gramophone's mechanics merely serving the reproduction of existing pieces. Thus the

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[27] Scheinberg, *Music and the Technological Imagination in the Weimar Republic: Media, Machines and the New Objectivity*. (PhD Thesis submitted at the University of California, 2007), 42, 58.
[28] H. H. Stickenschmidt, 'Mechanisierung,' *Anbruch*, (1926/ 8-9): 345-346, 345.
[29] Ibid., 346
[30] Adorno, 'Nadelkurven', *Essays on Music*.

precision which was preserved was that of an individual interpreter and the machine 'follows the interpreter in patient imitation of every nuance.'[31] This highlights the rejection of romanticism and places the artist, or in this case, the composer, on the highest throne and whose will must be obeyed. To Adorno the 'talking machine' had the ability to assist this goal with new music, but with existing music, it only deepens the power of the interpreter.

In his discussion of mechanical music and opera, Max Brand highlights the difficulty of implementing mechanical music on the operatic stage or, in other words, representing machinery on the stage operated by live actors, where the musical line must correspond to the music. He draws attention to music's power to direct stage movements and how music and material (physical movements or stage processes) must correspond. In his introduction Brand writes:

> In vorliegendem Falle ergibt sich die Frage: Zusammenfassung von Bühnenmäßigem Vorgang und seiner musikalischen Deutung, oder, und dies scheint das weitaus wichtigere, Transposition eines musikalischen Geschehens in visuelle Manifestation.
>
> In the presented case, this question arises: The summary of the stage process and its musical implementation, or, and this seems far more important, the transposition of a musical event into visual manifestation.[32]

So it is the music, according to Brand, that should bring the stage alive and direct this visual manifestation, the musical line must correspond with the stage processes, such as curtain movement, scenery rotation and lighting. The problem, Brand argues, lies in human relations, as these process are run by people rather than machinery, therefore Brand could not envisage a perfect moving stage during the 1920s due to human imprecision.[33] It could be interpreted that Brand believes that the moving stage should imitate the moving picture. Film is precisely reproduced by technology and the music emphasises the action, mimicking motion. So an operatic score for the mechanical stage should mimic a film score, where the music mimics the action on screen. Brand certainly attempted to achieve this in his factory opera, *Maschinist Hopkins*. What is more, Brand also calls for a reform of opera, emphasising the need for the opera to align itself with modern technology and the opportunities it brings:

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[31] Ibid
[32] Ibid., 356.
[33] Ibid., 359.

> Gewiß wird das gehwohnte Antlitz der Oper sich auf ungewohnte Weise ändern müssen. Aber ist das nicht notwendig? Wäre es kein Fehler, übersehen zu wollen, daß die Technik, der so wichtige Wegbereiter des neuseitlichen ihrer neuen und vollkommen Ausdrucksmittel kategorish fordert.
>
> Certainly the familiar face of opera will need to modify itself with new methods. But is that not necessary? It would be an error, to ignore the fact that technology, the important pioneer of modern man, is shaping the work of art as well as the use of its new and perfect means of expression.[34]

Here, Brand emphasises the impact of technology in both art and everyday life, and, like Stuckenschmidt, he draws attention to the precision of the machine. It would be foolish then for opera to ignore the opportunities of technology, even if during its implementation there are problems with mechanical execution. Even though Brand is keen to point out these issues, he does not deny the potential of the machine and its future in opera. Brand's concept of the visual implementation of the machine will provide useful insights for the case studies in this thesis, whether it be the visualisation of a radio broadcast in Krenek's *Jonny,* or Brand's own manifestation of the machine in *Maschinist Hopkins,* or even an absence of the stage in Goehr's *Malpopita* where the music has the greater task of driving the mechanical movement. All three case studies in the following chapters will show how opera adapted itself to modern technology, in regards to appropriation and musical performance.

On the subject of mechanical instruments, the composer Ernst Toch discusses their ability to reproduce and produce music.[35] He compares the inscription of rollers (e.g. for a barrel organ) to photography, which can even capture the individuality of the player. This accuracy of machines is able to transform the preservation of individual performance. Yet the composer refers to mechanical instruments as having a presence of 'non-warmth' within the crystal clarity which they produce.[36] Therefore, according to Toch, only a certain type of music is suited to these instruments. Existing music is not suitable for mechanical instruments, and thus new music should be created especially for such machines. Toch believed that mechanical music was a subgenre of musical activity, experimentation, but it was not and never would be a replacement for live music. Even though Toch is referring to mechanical instruments such as the player piano and barrel organ, these observations also apply to media technology such as the gramophone and

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[34] Ibid.
[35] Ernst Toch, 'Music for Mechanical Instruments,' *Anbruch,* (1926/8-9): 346-349.
[36] 'das Vorhandensein einer Nichtwärme,' Ibid., 349.

radio. As the record, just like the barrel from an organ, is carved with sound imprints, and the radio, like the player piano, creates distance between the performer and audience.

Toch's assertion of 'non-warmth' and the 'embarrassing sense of machine' is also in line with the experimental nature of the early technology. Toch's standpoint, unlike Stuckenschmidt, is that machines are fun, and create accurate reproductions, but that is all they can be; they are *reproducers* of music and will never replace traditional music making. Toch's argument is mirrored in Kurt Weill's use of the gramophone in *Der Zar lässt sich Photographieren* (1928), where a musical number was recorded prior to the performance and played on a gramophone; the orchestra remained silent. This was only for one scene however, and the orchestra remained the dominant form of music production throughout the rest of the opera. Furthermore Toch's view appears to echo Benjamin's argument of authenticity in, *The work of art in the age of Mechanical Reproduction,* where the 'aura' of the work is absent in mechanical reproduction.[37] This lack of aura is certainly comparable to the presence of a 'non-warmth' which Toch describes. The original work is separated from its reproduction, which is what Toch argues is almost comical in some mechanical instruments.

In 1929 Frank Warschauer discussed the issue of music produced in a purely electronic fashion.[38] Warscahauer, was a music, film and radio critic, as well as a poet and *Hörspiel* author and a close friend of Bertolt Brecht, who noted Warschauer's ambition and belief in progress.[39] This again shows that musicology during the Weimar Republic was extremely interdisciplinary, where musicologists were not simply music focused, but aware of wider industry and media. Warschauer's discussion is centred on the Theremin, an electronic instrument invented by the Russian professor, Leon Theremin. This instrument allowed the performer touch-free control of electronics, where the performer had no physical contact with the instrument. The performer moves their hands within the proximity of the two antennas, in order to control the pitch and volume. The instrument was very popular during the 1920s and 30s.[40] Warschauer notes that the Theremin's uniqueness within electronic music was its ability to produce musical character, meaning it was able to sound like a musical instrument or the human voice. He

[37] Walter Benjamin, *The Work of Art in the Age of Mechanical Reproduction,* trans. J. A. Underwood, (London: Penguin Books, 2008).
[38] Frank Warschauer, 'Electrische Tonerzeugung,' *Anbruch,* (1929/4): 215-216.
[39] Bertolt Brecht , Works , Vol. 1, 513.
[40] For more information on the technical development of the Theremin during the 20th Century see: Natalia Netruska, 'The Theremin and its Inventor in Twentieth-Century Russia,' *Leonardo Music Journal,* vol.6, 6 (1996): 57-60. JSTOR.

refers to this music as 'Ether-wave-music', which draws attention to the invisible nature of the music produced on the Theremin.[41] He also points out that the instrument utilises the problem of feedback which was all too common in early radio technology, where the art of controlling feedback produces music through the Theremin. Warschauer also notes that the Theremin player appears to conjure music out of thin air, where this sense of freedom from mechanical bondage, which inevitably contributed to the success of the Theremin. The idea of invisible 'ether-wave-music' produced by the Theremin, with no physical contact with the machine itself, makes the Theremin player's experience similar to the radio listener (without a headset), as they are physically disconnected from the mechanics of production and in both cases the music is invisibly produced over the ether. Warschauer states however, that the Theremin is not suitable for musicians, but rather for specific musical effects, referring to the defects of Theremin sounds, which are down to an undeveloped system rather than the player.[42] In spite of this, Warschauer was not against the electronic production of music, as he notes that developments were being made which eliminated these defects, such as the development of the 'super piano'. His discussion then, seems to parrot the wider debate about radio throughout this journal, as Warschauer discusses the capabilities and defects of the instrument, seriously doubting its capabilities in serving the musician, yet, unlike Toch, he is receptive to the concept of electronically produced sound, highlighting certain developments in the field, therefore seeing the potential rather than merely focussing on the limitations of the early technology.

Warschauer edited the specialist column *Musik und Technik,* which first appeared in the journal in 1929. Firstly, it is important to note, as Hansen has pointed out, that the English translation of *Technik* is more complex than the term 'technique'.[43] It is in fact to do with the artistic and extra artistic, industrial and pre-industrial practices, thus the relation between artistic and industrial technique.[44] This suggests that the column is not simply about performance techniques for radio, but an exploration of the relationship of techniques between, composer, performer and (radio) industry, which in turn suggests potential entanglements of dialogue between musician and industry.

[41] 'Ätherwellenmusik,' Warschauer, 'Elektrische Tonerzeugung', 215.
[42] Ibid., 216.
[43] Hansen, *Cinema and Experience,* 207
[44] Ibid

In the first issue of the journal in 1929, Warschauer introduces the rationale of *Musik und Technik*.[45] In doing so he refers back to the special issue of 1926, stating that the technical aspect of mechanical music, and in particular mediated sound, was at the time foreshadowed, but now its potential should be discussed in more depth. Warschauer appeals for discussion between interdisciplinary scholars to analyse the problem of musical and technology for its implementation in practical output. He outlines the main themes up for debate as follows: firstly the technical side, including the engineering processes and scientific needs; then the power involved in broadcasting, in terms of capitalist ownership and artistic authority; and finally the sociological implications of broadcasting aimed at the 'all'. Warschauer's call for attention on the processes of broadcasting music is also apparent:

> Die Zeit, in der Man die Technisierung sich selbst überließ, und die Arbeit des Musikers dabei Zufälligkeiten oder der Einzelinitiative und Einzelerfahrung preisgab, ist definitiv vorbei. Das Handwerk des Musikers so gut wie möglich den tatsächlichen technischen gegeben heiten anzupassen, aus dem schließlich sich ergebenden Gesamteindruck eine künstlich organisch erwachsene Totalität zu machen, ist zum selbstvertändlichen Ziel geworden.
>
> The time in which one left the mechanization to itself, and when the musician's work revealed randomness, or individual initiative and individual experience, is definitely over. To adapt the craftsmanship of the musician as well as possible to the actual technical conditions, to turn the resulting overall impression into an artistically organic, mature totality, has become a self-evident goal.[46]

This investment in an 'organic, mature totality' in mechanisation suggests that Warschauer and his contemporaries were beginning to see the potential of the machine as a producer of music, rather than merely regurgitating existing content. This is in contrast to Toch's view of the machine as a gimmick, even if new music were to be composed for it. All articles debating music and the machine appear to agree however, that they were in the initial phases of mechanical music and more experimentation was needed in order to understand the potential of the machine.

MUSIC ON THE RADIO

So far this chapter has discussed articles regarding music and the machine in the broader sense, yet *Anbruch* included discussion of music and specific media, which included the

[45] Frank Warschauer, 'Zur Einführung dieser Rubrik,' *Anbruch,* (1929/1): 33-35.
[46] Ibid., 34.

gramophone, film and radio. As radio was a new medium during the Weimar Republic, it was very much in its experimental phase, which naturally attracted critical discussion in academic journals. In the 1920s, contributors to *Anbruch* regularly discussed music on the radio, meaning existing music which was broadcast.

In *Broadcasting Umschau*, which appeared in *Musik und Technik,* Warscahuer presents requirements that should be applied for music intended for broadcasting, which includes the technical considerations of orchestration, such as the orchestral sound being unsuitable for the microphone.[47] This article will be explored further in the final chapter in order to show how these views were reflected in practical output and how these tips were implemented by Walter Goehr in *Malpopita.* For the purpose of the current discussion, Warschauer questions the mechanisation of radio, whether it will replace tasks that humans are already capable of and emphasising its potential for dissemination:

> Das Technische dringt hierbei nicht in die Substanz des Künstlerischen ein, sondern hat allein und ausschließlich die Art der Verbreitung einer gegeben und in sich unverwandelten Leistung zum Zweck.
>
> The technical does not penetrate into the substance of the artistic, but has an exclusive purpose of disseminating a given and unchanged performance.[48]

Here, Warschauer is referring to radio on a purely technical level, highlighting its ability to reproduce existing musical material, a fixed work originally not written for or adapted for radio, where broadcasting is merely a tool for the distribution of music. The essence of the work is unchanged by its dissemination; technology is merely a tool for mediation and does not interfere with the music itself, or to refer to Hansen's definition of *Technik,* the artistic and industrial techniques appear to co-exist. Warschauer's description of radio as a pure and very submissive mechanism of dissemination supports this and reflects his understanding of the technology.[49] This concept of radio as a precise reproducer of music also reflects Stuckenschmidt's argument and will be important in the analysis of Krenek's *Jonny* in the following chapter, where the radio appears to perfectly mediate Max's aria,

[47] Frank Warscahuer, 'Rundfunk Umschau,' *Anbruch,* (1929/1): 36-38.
[48] Ibid., 374.
[49] Ibid.

disseminating it to a terrace of guests who appear hypnotised by its sound, yet they seem disengaged with the artistic properties of the music.[50]

Warschauer also highlights the acoustic problems of music on the radio, in an attempt to address the lack of relevant mediation techniques. He states the fact that the reception of broadcasting is clearer with headphones than the loudspeaker, highlighting this as one of the main problems within broadcasting technology.[51] He then lists the other technical problems with the transmission of music on the radio that are indicated as: the reproduction of timbre of various instruments; the minimization of tone colour; the narrow dynamic range; and the difficulty in differentiating sounds in large orchestras and choirs. Warschauer sums up his list of grievances with the phrase, 'the sound appears as flattened as a plant in a herbarium'.[52] This emphasizes the awareness amongst musicologists of the limitations of the early radio technology and helps to explain their reservations about the broadcasting of classical music on the radio, especially big orchestral or choral works. This is later echoed by Adorno in *The Radio Symphony,* where he highlights radio's lack of ability to broadcast symphonic grandeur. Music on radio then, had to take into account these limitations and somehow avoid the tendency for 'flat' output, or even to quote Toch, the presence of a 'non-warmth'.

Following this, Warschauer underlines instruments which he believes are most suitable for radio. He describes the piano, timpani, as well as very low and high sounding instruments to be the most resistant to radio. The human voice, he states, is the same as it was before the gramophone, claiming that 'the microphone makes its own selection', and even the well trained voice may fall victim to low timbral quality here and there.[53] Warschauer's concerns do not show that he was in opposition to the dissemination of music through broadcasting; on the contrary, he simply indicates the debates and concerns of the artistic integrity of broadcasting music due to the early stages of technical development. Furthermore, Warschauer's technical understanding of the radio is clear, which can be seen in his use of technical terms and suggestions for improvements, emphasizing his involvement in the new medium. For example, in his discussion on the

[50] In scene 7 of Krenek's *Jonny,* Anita performs Max's aria on the radio. It is broadcasted through a loudspeaker onto a hotel terrace and is carried to max on the mountain: Ernst Krenek, *Jonny spielt auf,* (Piano and Vocal Score), (Germany: Universal Edition 1927), 146-151.
[51] Warscahuer, 'Musik im Radio', 374.
[52] 'der Klang erscheint flachgedrückt wie eine Pflanze in einem Herbarium,' Ibid.,376.
[53] 'das Mikrophon trifft seine eigene Auswahl,' Ibid.

size of the recording area he discussed the dampening and diffusion of sound in relation to microphones and studio space.[54]

Additionally, Warschaeur discusses the aesthetic problem of music on radio. He defines absolute music (music without intention to represent and illustrate) as invisible and is most effective with purely auditory reception, emphasized by his reference to Goethe (book 8, chapter 5), who wrote that true music is for the ear alone. Here, the character in Goethe's work wants to see the people with whom he speaks, but not the singer to whom he listens, stating that he prefers to listen to music with his eyes closed so he is not distracted by the performer.[55] Warschauer also quotes Busoni's essay *The Disadvantages of Seeing,* where Busoni argues that the musical connoisseur is disgusted when they see an orchestra visibly active.[56] The radio listener cannot see the performer, however, as Warschauer highlights, not only is the performer invisible, but so is the listener. This means that the connection between the artist and the performer is lost, there is no dialogue between them and the audience is unable to influence the performance.[57] Radio then, creates distance between the musicians and their audience and the dialogue of the concert hall is lost, yet the music is allowed to be truly invisible with no physical distractions.

As well as musical performance, radio was home to discussions about music. Paul Stefan notes the problem of talking about music on the radio by recalling his attempts to describe the concepts of new music to the Viennese radio audience. [58] He argues that the radio lecture requires more concentration talking to a visible audience. He writes:

> Dem Rundfunkhörer ist mit Zahlen und Daten nicht gedient, die besorgt ihm ein Lexicon, ein Leitfaden. Er will mitdenken, großen Linien folgen, im Hören mehr als Tatsachen, will Ideen finden.
>
> The listener is not served numbers and data, as these are provided to him by a Lexicon or a guide. He wants to think, to follow great lines, to hear more than facts, and to find ideas. [59]

[54] Ibid.
[55] Ibid.
[56] Ibid.
[57] Ibid., 378.
[58] Paul Stefan, 'Eine Neue Musikgeschichte – für den Rundfunk Gesprochen,' *Anbruch*, (1926/6): 283.
[59] Ibid.

Here Stefan is suggesting that listeners expected more than musical facts presented in guidebooks, but are searching for a deeper knowledge, and therefore a radio lecture on music should promote critical reception. Radio then, had the ability to bring to life the shelf of guidebooks and explain the great works and movements in a new way. Stefan notes that radio lectures on music should resemble a spoken version of Bekker's *Music History*.

Regarding artistic policy and radio, Warschauer presents the organisational questions of mechanisation.[60] This essay discusses the social, economic and artistic policy of film, gramophone and radio music. He mentions the difference between social/economic standardisation and artistic standardisation, where the intentions of a musician are compromised by the centralisation of radio policy.[61] He also discusses the concept of artistic and cultural policy within the structure of radio. He states the semi-privatisation of German radio was a result of the economy at the end of inflation and what this meant in terms of artistic policy.[62] The influence of artistic policy, according to Warscahauer, should not come from the individual broadcasting companies nor the government, but an artistic advisory board consisting of musicians and music scholars of a 'high rank', and referencing radio cultural council in Berlin.[63]

In relation to this, Kurt Sachts discussion of radio and the concert hall focusses on the concept of a music public, giving an overview of the listening spaces from the 17th Century onwards.[64] Sachts describes the intellectual audience and the *Kultur* of the 19th century and the fast paced nature of changing styles on modern music, meaning the artist and listener become more and more like strangers; art and enjoyment are broken apart and the modern listener was becoming increasingly indifferent.[65] He highlights the 'outdated' aesthetics of romanticism and states that the traditional concert hall was threatened in the modern state of things (due to the economic and cultural climate in Weimar Germany), where the audience does not wish to engage with art in an intellectual way, but in the form of enjoyment and entitlement, yet as Sachts writes, 'At the time of change, of hopeless anarchy, the radio is born.'[66] This so-called 'crisis' of music and

[60] Frank Warschauer, 'Organisationsfragen der Technisierung,' *Anbruch*, (1929/4): 170-173.
[61] Ibid., 171.
[62] Ibid., 172.
[63] Ibid.
[64] Kurt Sachts, 'Rundfunk und Konzertsaal,' *Anbruch*, (1929/5): 217-218.
[65] Ibid., 217.
[66] 'Und in dem gleichen Augenblick der Zeitenwende, der hoffnungslosen Anarchie, wird Rundfunk geboren.' Ibid., 218.

audience in the 1920s/30s mimics the debates on the opera crisis and emphasises that the arrival of radio in Germany came at an uncertain time for German musicology. Sachts describes the late 20s as a 'fatal moment of broadcasting,' proposing the question of broadcasting as the breaker of boundaries.[67] He asks whether radio will break down the barriers between nations so ideas can be shared worldwide, and claims that with the radio the concert hall is extended worldwide, not only for audiences but for composers. Throughout history musicians have composed with the performance space is mind (churches, courts, concert halls etc.), and here Sachts argues that the new infinite space of the wireless needed a new musical genre, as audiences would not be satisfied listening to Italian opera through their headphones, as it is then removed from the space which the composer originally intended. Yet again, this shows concerns within Weimar musicology that music on the radio should be treated with caution and that the radio was not necessarily an easy tool for dissemination and democratisation of music, or indeed an extension of the concert hall. Composers should write specific music for the radio, consider its space, and adapt to it, rather than adapt existing music, which compromised audience experience.

By 1930, discussions on music on the radio had developed in *Anbruch* and it featured more contributions from industrial experts, including a transcript from Dr Hans Flesch's talk at the *Berliner Rundfunk*.[68] Hans Flesch had a profound career in early German radio, including his role of artistic director at Southwest German Radio, where he worked on his radio play *Zaubarei auf dem Sender,* which was broadcast from Frankfurt in 1924. The text for *Zaubarei* constructs and deconstructs a radio broadcast, dramatizing the issues related to the emergence of radio as a new medium, especially in terms of control.[69] From 1929 to 1933, Flesch moved to radio Berlin, where he worked with Walter Benjamin, Bertolt Brecht, Paul Hindemith, Arnold Schoenberg, Alfred Döblin, and Kurt Weill. Flesch's transcript in *Anbruch* appears during his time spent at radio Berlin and presents a vision for radio for the year of 1930. It has a clear focus towards the future of radio and was published only a year before the premier of Goehr's *Malpopita.* The presence of such a lecture in *Anbruch* clearly shows the advances within Musicology regarding radio during the final years of the Republic, which was arguably

[67] 'Schicksalaugenblick der Rundfunks,' Ibid.
[68] Hans Flesch, 'Rundfunk im neuen Jahr: Vortrag, gehalten im Berliner Rundfunk am 1. Januar 1930 von intendent Dr. Hans Flesch,' *Anbruch,* (1930/2): 58-64
[69] Hans Flesch, Translated by Lisa Harries Schumann, and Lecia Rosenthal. 'Magic on the Air: Attempt at a Radio Grotesque.' *Cultural Critique* 91 (2015): 14-31. doi:10.5749/culturalcritique.91.2015.0014.

influenced by the close working relationships between the radio industry and artists, writers, theorists and composers.

In his lecture, Flesch draws attention to the listener's investment in the meaning behind a broadcast, rather than the beauty of the music itself. This is emphasised by the popularity of memoires and biographies of composers, claiming that audiences are influenced by schools of thought and political opinions, rather than the art itself.[70] The idea of finding the meaning behind a certain piece of music, in particular political and social meaning, may indeed add context to the plot of Goehr's *Malpopita*, where the political and social critiques are at the forefront of the opera. Flesch also attempts to define radio programming and highlights the dangers of long, continuous and artistic products, as they appear to cause confusion. He explains his reasoning as follows:

> Wir denken noch mit Entsetzen an Kurse, Zyklen und leere Gelehrsamkeit der ersten Rundfunkjahre zurück; Erwecker einer Sehnsucht nach dem Kitsch und seine ungewollten Wegbereiter. Die gutgemeinten Versuche dieter ersten Jahre waren von vorherein zum scheitern verdammt, weil man den Rundfunk nicht als ein neuartiges Vermittlungsinstrument empfand und behandelte, sondern sich im Programm an Bestehendes, an das Buch, an die Zeitung, an den Konzertsaal, an das Theater anlehnte.
>
> We still look back in dismay at [educational] courses, cycles and empty scholarship from the first years of radio; awakening a longing for kitsch and its unwanted forerunners. The well-intentioned attempts of these early years were, by and large, doomed to failure, because radio was not perceived and treated as a novel mediating instrument, but as borrowing from existing products such as the book, the newspaper, the concert hall, the theater.[71]

Here, Flesch openly acknowledges the misunderstandings of scholars during the early years of radio, and in doing so emphasising the change of attitudes by the early 1930s, where musicologists saw radio's potential as not merely an imitation of existing works, initial written for other media, but as a vessel for new material. The early radio technology had its limitations in mediating works which were not initially designed for it, but its potential to mediate its own music was underestimated during the early years of radio. Flesch demonstrates however, that by 1930 scholars had not fully grasped the unique nature of broadcasting, but they knew its basic qualities, which he labels as the

[70] Ibid., 59
[71] Ibid., 59-60.

'localisation of its effect' and then the 'simultaneity of events behind the microphone and their reception by the listener'.[72]

Furthermore, Flesch questions whether the listener is in need of what the broadcaster wishes to give them.[73] He acknowledges that the tired working man needs enjoyment, and cannot survive simply on art and entertainment, but the question is how this entertainment is delivered. Flesch states that it was not adequate to present a simple broadcast of cabaret to the listener, as the absence of the artist created a limitation of stylistic impact and would lead to gruesome tastelessness. Furthermore, Flesch argues that popular songs appear to drip out of the loudspeaker like a 'wet sponge'.[74] Therefore, new techniques must be developed in popular music broadcasting, as well as classical/art music broadcasting in order to combat this issue. This echoes Warschauer's views of flat sounds on the radio, showing that the aesthetic of music reproduced on the radio was still in debate when planning the future of radio. What is more, Flesch's speech highlights the change of radio broadcasters or 'senders':

> Lassen Sie mich zwei Worte über den Vortragsteil des Senders sagen. In der ersten Zeit des Rundfunks 'Radio' noch als eine spielerische technische Angelegenheit galt, hinter der Amerikanismus, die Maschinisierung gespenstig zu drohen schien, war es schwer, Rundfunksender zu bekommen.
>
> Let me say two words about the Sender. In the early days of broadcasting 'radio' was still considered a playful technical affair, behind the Americanism, which seemed to threaten the ghostly mechanization; it was hard to get broadcasting stations.[75]

Flesch's statement here clearly reflects the language and critiques offered in the 1926 special issue regarding music and the machine, where the machines were considered gimmicks and threatening artistic integrity. He exposes early radio thinking as cautious and naïve about radio's potential, which is emphasised by his use of 'playful' and 'ghostly mechanisation'. Flesch's speech indicates that by 1930, radio was no longer viewed in this way, as investments were being made into more broadcasting stations. Flesch's conclusion outlines the potential of the connectivity of radio, where he presents the idea of its 'connectedness' as the highest objective of radio.[76] This is not just the connection

[72] 'Zunäscht in der Lokalisation seines Wirkungsfoldes und dann in der Gleichzeitigkeit von Begebenheiten hinter dem Mikrophon und ihrer Aufnahmme durch den Hörer.' Ibid., 60.
[73] 'Ist dem Hörer nötig, was ich ihm geben will?' Ibid., 60.
[74] '...ein Nasser Schwamm aus dem Lautsprecher fällt,.' Ibid., 61.
[75] Ibid.,63.
[76] Ibid., 64.

between countries and continents, but the connection of people who live next door to each other, showing that radio was becoming more and more a part of everyday life by 1930 in Germany.

OPERA AND RADIO

Moving onto debates regarding opera and radio specifically, Warschauer believed that a greater problem than absolute music on the radio was music that relies on the eyes and the ears, an example being opera:

> Diese Form der Aufführung, bei der die Oper Gattang nach in die Nähe des Oratoriums gedrückt wird, ist in vieler Hinsicht beachtenswert und kann auf die Entwicklung des Opernwesens nicht ohne Einfluß bleiben.
>
> This type of performance, in which the opera is pushed towards the proximity of the oratorio, is worthy of consideration in many respects, and is surely influencing the development of the character of opera.[77]

Warschauer's claim regarding operatic radio somewhat changes the status of opera. If one cannot physically watch the drama as one listens, then it is a mere oratorio not an opera. The problem of the absence of the eye in the genre of radio opera then must be overcome in both the reproduction of opera on the radio and by opera which is specifically composed for the radio. The final chapter will discuss how Walter Goehr overcame this hurdle and attempted to give eyes to the listener in his radio opera *Malpopita,* where Goehr created sound effects and narrations with the human voice.

In a section on radio and the theatre, a letter from a K. Rosen, a director of the Russian theatre states that radio is not in competition with the theatre, but is 'the most zealous and most effective promoter of the theatre.'[78] Here Rosen is referring to a radio performance of *Carmen* in Leipzig in October 1929 by the Russian theatre. He talks about the positive impact of the experience. Even though this letter discusses the broadcasting of an existing work, it shows that theatre directors, as well as critics, were acknowledging the potential of the fusion of the traditional medium of opera and the new medium of radio.

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[77] Warscahuer, 'Musik im Radio', 374

[78] '…sondern der eifrigste und wirksamste Förderer des Theaters ist.', 'Der Rundfunk hilft dem Theatre,' K. Rosen, 'An die Mitteldeutsche Rundfunk A. G. in Leipzig,' *Anbruch,* (1930/2): 66-67.

In 1931, Ernst Schoen remarked upon the nostalgic view of operatic broadcasts, where listeners could be transported to a time where visiting the opera was affordable.[79] He addresses the popularity of operatic broadcasts, stating that the genre of opera addresses the needs of the individual and the collective audience, which is achieved by its multiform wisdom, or in the words of Hutcheon, multimediated dimensions.[80] Schoen's essay draws attention to the uncanniness of the experience of the listener when hearing an operatic broadcast; the listener can hear the tuning of the orchestra and coughs from the crowd. To the music critic this is a gimmick, but to the audience this enhances their nostalgic experience, as they could close their eyes and be transported to the opera house, creating an 'aura of fantasy'.[81] This attempt at the recreation of aura reflects Benjamin's argument. It is almost as if Schoen is mocking the attempt, as he knows that it cannot be recreated mechanically as Benjamin states. Schoen's focus on audience behaviour highlights the fact that composers and critics not only viewed the radio for its future potential, but for its ability to mediate and simulate the past.

As already noted, the later years of the Republic included contributions from industry experts. In 1930 Dr F. Noack from *Schlachtensee Berlin* offered his expert advice on the technical side of broadcasting opera from its natural habitat, the opera house. He is evidently a guest expert for this issue, in order to present specific technical information of broadcasting music. [82] His practical experience in the broadcasting industry is evident in his language and the construction of the article. It opens with a clear description of the microphones and other technology used in broadcasting opera from the opera house, stating that an opera broadcasting system during the 1920s consisted of one or more microphones with preamplifiers which strengthened the electrical current.[83] It explains how the electronic waves are sent from the opera house to the radio station and Noack also refers to the first opera recordings via telephone during the winter season of 1920/21.[84] The article discusses the best place to position the microphone, stating, 'The microphones should not be too far from the stage, but you too, or rather the artists, should not be too close.'[85] Here Noack highlights the problem of placing the microphone in the

[79] Ernst Schoen, 'Oper im Rundfunk,' *Anbruch,* (1931/5):110-111.
[80] Hutcheon, 'Interdisciplinary Opera Studies,' 110. (For a discussion on opera as multimedia, see the Introduction and Historiography chapters.)
[81] Ibid., 110.
[82] Dr F. Noack, 'Die Technische Seite der Opernübertragung im Rundfunk,' *Anbruch,* (1930/6): 277-279.
[83] Ibid., 277.
[84] Ibid.
[85] 'Die Mikrophone sollen nicht zu weit von der Bühne entfernt, aber auch ihr, respektive den Künstlern, nicht zu nah aufgestellt sein.' Noack, Ibid., 278.

correct spot. A compromise must be made as if the early technology would catch sounds between the stage and the microphones, as well as what was happening on the stage, but at the same time it would not do to put the microphone too close to the singers, so a compromise must be reached. As well as being technically informative, this article explains the sounds of tuning in the orchestra and coughs and splutters from the audience, which was highlighted by Schoen, who claimed that these were not necessary and turned the audience's experience of opera on the radio into a pastiche. Noack then, is justifying the technical reasons for these artistic arguments, emphasising the need for interdisciplinary studies when designing an operatic broadcasting system. Additionally, Noack asserts that the key to a successful broadcast is to design the broadcasting system around the space which the opera house provides. He states that the clean execution and operation of the preamplifier is also a great influence on a good operatic broadcast. He also argues that the technical workers should have a certain degree of musical knowledge and feeling, yet this is not the case in Germany at the time due to the private companies favouring technical knowledge.[86] This article then, is essential in understanding the technical set up of an operatic broadcast during the Weimar Republic and will indeed assist the understanding the composition and score directions in Goehr's radio opera *Malpopita,* even though it was broadcast from a studio rather than an opera house.

In the sixth issue of 1929, Warschauer published a text regarding his views on the future of opera on the radio.[87] In the opening, Warschauer states that the future of opera depends on the technical means of its dissemination. He applauds the ability of radio to disseminate opera across the boundaries of 'educational and temperamental requisites'.[88] This shows Warschauer's positive view of radio's potential to disseminate opera to the masses; he even goes so far as to compare the dissemination of opera to German households with such utilities as gas and water. He also states that if radio was a great evolution in opera consumption, television would go one step further. This shows that by 1929 radio had become a solid part of the musical culture, musicologists were already looking to the next stage of media development. This article remarks on the social implications of opera on radio, rather than the technical. Warschauer does not discuss the technical limitations of radio's ability to broadcast opera, but focuses on the abolition of

[86] Ibid.
[87] Frank Warschauer, 'Die Zukunft der Oper im Rundfunk,' *Anbruch*, (1929/6): 274-276. An English translation is available in: *The Weimar Republic Sourcebook*, edited by Anton Kaes, Martin Jay, and Edward Dimendberg, (1994), 607-609.
[88] Ibid., 274.

a purely aristocratic operatic audience. Warschauer is also discussing 'Oper im Radio' (opera on the radio), meaning the dissemination and remediation of existing operatic repertoire. Nevertheless, this article does look to the future and the potential of a genre of media opera, albeit reproduction of existing opera, as opposed to opera written specifically for radio.

MUSIC FOR RADIO

Towards the end of the 1920s and early 1930s, the discussion about music and radio shifted. As well as the inclusion of industry experts, the idea of radio music was introduced in Warschauer's article entitled *Rundfunkmusik* (1929).[89] Before investigating this essay further, it is important to note the difference in title from Warschauer's 1926 essay, *Musik im Rundfunk*, as discussed earlier. The language of this earlier title means music played on the radio, in other words, music *reproduced* on the radio. The later title, *Rundfunkmusik*, implies a specific genre of music composed for the radio, or music *produced* by the radio. This in itself shows Warschauer's change in attitude towards radio and an acknowledgement of radio's potential over its technological limitations. This attitude is certainly reflected in the main body of the article, as Warschauer expresses the importance of the attitudes of the musicians and the techniques of musical transmission, thus emphasising the dynamics of the *Technik*. His use of technical language shows how the knowledge of the medium has developed, and in turn, he is able to offer more practical solutions to earlier stated technical limitations:

> Es liegt bei der Rundfunkübertragung zunächst zweifellos eine Entscheidung vor gegen das große Orchester, gegen jeden Al-fresco-Stil, gegen kompakte Klangmassen überhaut und gegen die Faber als dominierendes Element, ferner gegen die Pointierung einer subjektivischen Sinngebung: eine Begünstigung anderseits der kleinen Klanggruppe, die charakterisiert ist durch das Fehlen von Füllstimmen und Ornament, durch reelle Stimmführung und die Verbundenheit solistischer Wirkungen.
>
> The decision initially lies with radio transmission against [the use of] the whole orchestra, against every Al-Fresco style, against the compact mass sound, and even against colour as the dominant element, also against the pointedness of a subjective interpretation: in favour of, the small sound group, which characteristically is through the lack of full voice and ornament, through real voice leading and the attachment of soloistic effect. [90]

[89] Frank Warschauer, 'Rundfunkmusik,' *Anbruch,* (1929/2): 84-86.
[90] Ibid., 84.

Warschauer is questioning the implementation of the full orchestra for radio music, where instead a small group of musicians should be used, with thinner textures and more solo passages. He also mentions the time lag on radio and therefore its unsuitability for complex voice leading, profound polyphony and harsh dissonance. With all this in mind then it is essential, according to Warschauer, for composers to understand the techniques of all the apparatus before they compose for radio, stating that anything can be reproduced on the radio as long as the technology and the space are considered.[91] Again, Goehr demonstrates this understanding of how to compose for radio in *Malpopita.* Goehr, like Warschauer, worked in the radio industry and had musical knowledge, which are clearly demonstrated by the techniques used in his composition. For example, Goehr scored utilised the human voice in his composition and scored the music for a small orchestra. His use of *Sprechstimme* and *Sprechgesang* softened the dissonances and allowed for clear articulation of words through broadcasting.

Following Warschauer, Max Butting, discusses a composer's view of radio music.[92] He argues that the listener cannot judge the quality of a work as certain characteristics are lost during transmission, which depends on the recording space. Butting emphasises the capabilities of the concert hall and opera house in communicating a mass affect to the audience, whereas on the radio, this had not yet been experienced. Butting also highlights what were, in his opinion, the two views of radio music: the idea that it is the apparatus which stands between the listener and performers, as long as the technician succeeds the musical experience simply adapts to reproduction. The other view being that the loudspeaker was not adapted to the natural sound of the instruments and the listening experience, or milieu, differs from that of a live performance, and how the effect of the music is very different to those experienced so far.[93] Interestingly, Butting notes that the composers and performers are interested in how best to broadcast music and they should be taken into account and proposes a question for the performer:

> Wie habe ich mich vor dem Mikrophon zu verhalten, um ein Werk in Bezug auf Form, Klang und Eigenart der musicalischen Sprache klar und eindeutig zur Wirking zu bringen? Die Antwort wird nur aus der Erfahrung erteilt werden können, und zwar nur aus der experimentell fundierten Erfahrung. Daher sind die Versuchsarbeiten, wie sie an der

[91] Ibid., 85.
[92] Max Butting, 'Der Komponist über Rundfunkmusik,' *Anbruch,* (1929/2): 86-87.
[93] Ibid., 87.

> Hochschule für Musik und dem Klindworth-Scarwenka-Konservatorium in Berlin gemacht werden, von großer Wichtigkeit.
>
> How do I conduct myself at the microphone, in order to bring a work, in relation to form, sound and the character of the musical language clearly and explicitly to effect? The answer will only come from experience, and also only from experimental and substantial experience. Therefore the trials, as they are made at the Academy of Music and the Klindworth-Scarwenka Conservatory in Berlin, are of great importance.[94]

This acknowledgement of the composers' active involvement in radio experimentation shows the importance of radio music to composers during the later years of the Weimar Republic. Butting is recognising the social responsibility of radio to connect music and people. It is therefore the duty of the composer to speak to the listener through their music, making the composers involvement with radio experimentation vital. According to Butting, when the composer fulfils this duty, the listener will no longer have to endure 'boring' broadcasts.

CONCLUSION

The journal *Anbruch* displays changing attitudes towards radio amongst composers and critics and can viewed as a microcosm for Weimar musicology, due to its wide range of contributors from various backgrounds such as musicology, sociology, composition, as well as the introduction of industry experts such as Flesch and Noack during the later years of the Republic. This shows that during the later years of the Republic, musicology was seeking professional advice in order to overcome these issues of the *Technik.* The journal's Austrian origin and mix of Austrian and German contributors indicates trans-border relations within Weimar musicology. In the mid-20s, critics appeared to agree that music and its relationship to the machine was still in its experimental phase, and work needed to be done in order to understand its full potential. The experience of music is also key to these debates. Toch's observation of a 'non-warmth' and Warschauer claims of 'flat' mechanical sounds identify limitations of early technology. Another recurring theme of this journal is that new music must be written for the radio, as opposed to mere reproductions of classical repertoire, as the limitations of early technology change the performance space and ultimately compromise the experience of the listener. Therefore radio should not be treated as a mere extension of the concert hall, but an entirely new

[94] Ibid.

performance space. This is reflected in the change of language from *Musik im Radio* in earlier articles to *Radiomusik* being used in 1930.

Additionally, Warschauer's special column, *Musik und Technik*, began to engage with technical considerations of broadcasting music through sound film and radio. This column acts as a turning point for the journal in its attitudes towards radio, as the content presented by Warschauer demands an interdisciplinary approach to the technical problems of mechanisation. The articles written in this column and thereafter portray a different attitude towards radio, it is embraced for its potential and there are articles written by technical experts. The invisible nature of radio music is also drawn out in these discussions, where the relationship between the performer and listener is altered considerably by the ether. This analysis of this journal will influence the subsequent chapters of this thesis as it will show how theory of radio in musicology influenced practical output. The analysis of Krenek's *Jonny* will reflect the issues and concerns raised in the mid-20s on the limitations and gimmicky nature of recorded sound. The analysis of Brand's *Maschinist Hopkins* will show how opera was beginning to adapt to mechanical techniques and will reflect Brand's attempt to solve the problem of opera and mechanical music of which he discusses in his article. The final chapter will examine how the technical advice that originated in *Musik und Technik* and was present in *Anbruch* during the early 30s was implemented by Walter Goehr in his radio opera *Malpopita.* The thesis will now continue by exploring these operatic case studies and in doing so it will show how ideas expressed in *Anbruch* appeared on the operatic stage, reflecting entanglements between theory and practice in Weimar experimental opera and radio.

Chapter 3

Zeitoper as an Entangled Medium during the Weimar Republic: New Perspectives on the use of Radio in Ernst Krenek's *Jonny Spielt auf*

> Located in the boundaries between public discourse and private enjoyment, radio can be a device for communication and a medium for artistic practice and experimentation.
>
> *Daniel Gilfillian*[1]

The premiere of *Jonny spielt auf* took place in the *Staadttheater*, Leipzig on 10 February 1927. The title character, Jonny, an African American jazz musician, lives in the moment, flaunting his sexual liberation. His carefree attitude and catchy tunes 'revolutionise' the entertainment industry so 'serious' composers like his antithesis, Max, cannot succeed in the metropolis of popular culture. Gilfillan's words sum up the appropriation of radio in Ernst Krenek's *Jonny spielt auf*. The radio speaker is used in this opera as a prop, a vehicle of dramatic action, and to divide physical and metaphysical space. This chapter will offer new perspectives on this opera by paying specific attention to the radio scene, which represents both public and private listening experience, drawing upon radio's ability to communicate, whilst at the same time employing it on stage as a symbol of modern life.

Jonny spielt auf epitomised the opera crisis of 1920s Germany and is often labelled the first true *Zeitoper*.[2] The *Zeitoper,* as discussed in the first chapter, was a satirical genre from the Weimar Republic, and has been characterised for its portrayal of the *Zeitgeist*, the use of modern technology and media on the stage, and its jazz influences. This chapter will explore the use of the radio in *Jonny*, going beyond current research by examining both the materiality of the loudspeaker, and the audience represented by the hotel guests. After an examination of *Jonny* and his world, the chapter will examine Krenek's stage directions in the score and will discuss the music that was broadcasted by radio, the aria *als ich damals.* Following the score analysis, the scene will be placed within the context of media history. This scene's relationship to radio broadcasting within the

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[1] Daniel Gilfillan, *Pieces of Sound: German Experimental Radio,* (Minneapolis: University of Minnesota Press, 2009), xiii.

[2] Nanette Nielsen, 'Ernst Krenek's Problem of Freedom in *Jonny spielt auf*,' Twentieth Century Music, (10): 25-57, 26, Cambridge Core.

wider Republic will be discussed, whilst drawing upon contemporary radio discourses, drawing particular attention to audience behaviour. It will view *Zeitoper* as an entangled medium, drawing upon themes defined by Cronqvist and Hilgert.[3] This chapter will show the use of the loudspeaker as a prop, and how the use of radio in *Jonny spielt auf* adds a new dimension to opera's multi-media aesthetic in its representation of the invisible voice through the simulation of a radio broadcast. It will become clear that radio in *Jonny* is not only a dramaturgical mediator in terms of moving the plot forward, but creates a parallel to the reservations of contemporary critics such as Theodor Adorno, acting as an exaggerated representation of listening behaviour.

INTRODUCTION TO JONNY AND HIS WORLD

Jonny Spielt auf was the most frequently staged new opera in Germany in 1928 with a staggering 421 performances in 45 different opera houses, with 25 performances at the *Berlin Stätische Oper* alone.[4] This included performances outside Germany, such as Prague and Vienna. The opera was translated into Russian, Hungarian, Slovene, Serbian, Polish, and Flemish, with many companies wanting to cash in on its popularity.[5] Furthermore, the opera was well received in Berlin and in October 1927 performance was broadcast over the *Berlin Funkstunde*.[6] The opera's success, albeit short lived, is often attributed to its representation of modern society, such as the jazz idioms presented by Jonny and his jazz band. Despite these jazz influences, the opera failed in Paris and New York. This was, according to John L. Stewart, due to its clumsy translation and the scornful reception by critics.[7]

The opera has two main settings; the Swiss Alps and city scenes, all of which morph into one metropolitan city alluding to Paris. These two settings are the polar opposite of each other both environmentally and musically. The natural setting of the

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[3] Marie Cronqvist and Christoph Hilgert, 'Entangled Media Histories,' *Media History*, 23:1, (January 2017), 130-141, Taylor Francis Online: http://www.tandfonline.com/doi/full/10.1080/13688804.2016.1270745

[4] Susan C. Cook, Appendix material, 'Statistics on Opera Performances,' Largely taken from Wilhelm Altmann's series of yearly 'Opernstatistik' articles, published in the *Allgemeine Musikzeitung*, *Anbruch*, in *Opera for a New Republic: The Zeitopern of Krenek, Weill and Hindemith*, (Rochester: University of Rochester Press, 1988), 217-218.

[5] John L., Stewart, *Ernst Krenek: The Man and his Music*, (Berkeley: University of California Press, 1991), 87.

[6] Cook, *Opera for a New Republic*, 104.

[7] *Jonny* was performed in Paris in June 1928 and in New York on 9 January 1929 and was cancelled after 3 performances, Ibid., 88.

mountains and glacier are mirrored by the 'purity' of Max's music, who is one of the main characters of the opera, whereas the city is alive with jazz and the virtuosic romantic ideal. Both of these settings display hotel scenes, however it is the mountain hotel which is the setting for the radio broadcast in scene 7. As the scenery in *Jonny spielt auf* so clearly represents contrasting artistic genres, and in addition the six main characters in the opera represent five different types of artists. The title character, Jonny, portrays the metropolitan world of popular culture, who is driven by his desire to steal Daniello's Armati violin. Jonny's antithesis, Max, represents the 'serious' composer from the 1920s, an autobiographical portrayal of Krenek himself, and is the protagonist of the operatic narrative. Max is a modernist composer struggling to find his identity in the modern world both artistically and sexually. Jonny represents the new Americanised popular culture, which seems to overshadow more 'serious' art which Max aspires to. Max's sexual struggles are revealed clearly in his relationship to Anita, an opera diva who is seduced by the glamourous life of the city, whereas Jonny appears to be sexually liberated. Max and Anita's relationship is tested when Anita leaves for the big city to star in an opera and Max remains behind, preferring the isolation of the glacier where he feels most at home (which was heavily influenced by Krenek's own experience of the Swiss Alps). Whilst away singing opera in the big city, Anita stays in a local hotel. In the hotel, she meets Daniello, a flamboyant romantic violinist, with whom she has a one night stand. The final character in this opera is the chamber maid Yvonne, a burlesque like figure who depends on the other characters in the opera in order to survive. A more detailed plot description of *Jonny spielt auf* can be found in the Appendix.

The opera plays on these types of artists, how they interact with each other, and their role within Weimar society. For example when Daniello gets killed by a train, no one seems to care or even notice. This symbolises the rebellion against the romantic virtuosity of music by composers of the Republic, as highlighted by Bekker's recognition of the underrated virtuoso and their cultural significance.[8] The battle of virtuosity verses improvisation is fully resolved at the end of the opera where Jonny, finally triumphant in possessing Daniello's Armarti violin, stands playing it boldly on the station clock. This, through clever stage effects, turns into a globe, and Jonny stands as a new leader of the artistic and modern world, leading his followers away from past ideologies of art.

[8] Paul Bekker, *The Story of Music: An Historical sketch of the Changes in Musical Form,* Translated by M.D Herter Norton and Alice Kortschak, (New York: W. W. *Norton* & Company, Inc., 1927), 216.

The opening of the opera can be seen as a jibe at Krenek's rival, Arnold Schoenberg, pointing to their artistic differences. Schoenberg wrote absolute music, grounded in Expressionism, whereas Krenek recognised that audiences required music for entertainment. Max's opening line 'Der Schöner berg' or 'the beautiful mountain', which is sung with allusions to Schoenberg's twelve tone technique.[9] Max sings of how enticing the mountain, or Schoenberg's philosophy, is to a composer, the renunciation of success in the modern world. Yet as the opera progresses, Max leaves the beautiful mountain and begins to write functional, entertaining music for the modern audience. The antagonism between the pair with a retaliation from Schoenberg in the form of his opera, *Von Heute auf Morgen* (1929). The opening line 'Schön war es dort' (it was beautiful there), refers to opening line *Jonny.* Schoenberg's line is uttered by a gushing husband, which he denounces at the end of the opera.[10] Here, Schoenberg is unmasking the false promises of *Zeitoper,* showing that mere fashion should replace artistic integrity.

Contemporary Weimar critics discussed the reception of *Jonny* and its place in Weimar operatic climate. Dr Adolf Aber reviewed the premier in *Musikblätter des Anbruch.* Aber's review goes into details on the unfolding action. From the outset, Aber praises Krenek for his clear awareness of modern life, and states that the work is fully submerged into the events and emotions of modern life.[11] He acknowledges the loudspeaker in his synopsis, highlighting the dual dramaturgical purpose of the radio in the scene: to bring the voice of Anita to Max over the mountain, and to assist Daniello in identifying his old Armati violin which has been stolen by Jonny.[12] This will contribute to the analysis of Krenek's representation of radio and the function of radio as a dramaturgical tool. After this synopsis, Aber goes on to make some more general comments about the opera and its music. He mentions the satirical nature of the music, applauding Krenek's ability to create real sounds of cars and trains musically and he notes Krenek's critique of the advancement of jazz. His final page is dedicated to praising the *Leipziger Oper* and the set designer, Walther Brügmann, praising him for his 'brilliant idea to turn the entire stage into a kaleidoscope, which the audience could gaze upon all these colourful scenes.'[13] Aber praises Brügmann for his dramaturgical solutions,

[9] Krenek, *Jonny spielt auf,* 1.
[10] Cook, *Opera for a New Republic,* 182.
[11] Adolf Aber, 'Ernst Krenek: *Jonny spielt auf* Uraufführung in Leipzig,' *Anbruch,* (1927/ 3): 127-132, 127.
[12] Ibid., 129.
[13] 'Es war bereits eine genial Idee von ihm, die ganze Bühne in ein Kaleidoskop zu verwandeln, durch das hindurch der Zuschauer alle diese bunten Szenen betrachten konnte.' Ibid., 132.

especially in the final scene where Krenek's stage directions are technically demanding. He also notes how well the premiere captured the hustle and bustle of the hotel guests around the loudspeaker, yet this is all he says regarding the radio scene. It is clear from this review that the premier was visually spectacular and the audience was captivated by the various machines on stage. Yet the visual aspects of the radio are somewhat glossed over in this review.

Little else remains from the premier of *Jonny spielt auf*, due to the artefacts being destroyed during the Second World War or by floods during the 1940s and 1950s. The *Stadtgeschichte Museum Leipzig* contains within its collection a handful of sources on this opera, a few of which can be seen in their exhibition of the Weimar Republic. The collection includes, press cuttings from the premiers in Leipzig (which are illustrated), Frankfurt and Berlin, a piece from the 25th performance in Leipzig (including a musical extract of *Leb wohl mein Schatz*, a popular jazz number from the show that was released for the gramophone), sketches of the characters made by Walther Brügmann, a photograph of the train station scene, advertisements for the premier, a poster from the 1990 Leipzig revival, and some special menus from the night of the premier labelled Hotel Astoria.[14]

Shortly after the Weimar years, scholars looked back on this work as a product of its time. For example in 1935, Paul Bekker included the work in his book, *The Changing Opera:*

> Jonny is ruled by a new will to life, breaking through all sentimental considerations with an elemental flow of animal spirits. With its vigorous nonchalance, and its incorporation of types drawn from actual life, *Jonny* was the first big operatic success of this generation. This was due to the cleverness with which it combines familiar operatic types, a vocal style inclined towards that of the operatic, and dance gesture characteristic of the time. The fact that the whole sprang from an ironic purpose was overlooked, as was the serious intent of the lyric parts. Thus was formed the new concept of jazz opera…[15]

Here Bekker provides a summary of all academic debates on *Jonny* from 1927 to modern scholarship. The so called 'new will to life' is represented by Jonny's carefree attitude and obsession with material gain. His nonchalant attitude towards people can be seen in the way he treats the other characters. The aspects from 'actual life' do not just refer to

[14] The Museum provides an online search engine with digital scans of the sources that can be found here: http://www.stadtgeschichtliches-museum-leipzig.de/site_deutsch/sammlungen/objektdatenbank/framesetting.html (Accessed 28/02/18).
[15] Paul Bekker, *The Changing Opera*, translated by Aurthur Mendel (London: J.M. Dent & sons, ltd., 1936), (Original published in America, 1935), 282.

the technology such as the telephone, train and loudspeaker which are used as props, but the musical styles and attitudes towards art. Bekker highlights the montage technique used in *Jonny* and indicates how its audience misinterpreted its 'serious intent'. Here Bekker is referring to the audience's fascination with the jazz music and their lack of ability to understand the intellectual commentary embedded within the work that Krenek intended; a critique of the struggle of a 'serious' artist in the age of popular culture, which was indeed Krenek's projection of his own insecurities with his own compositional style.

To understand Krenek's compositional style, it is important to look at his teacher. Krenek, like many of his contemporaries, studied composition under Franz Schreker (1878-1934). Schreker was an Austrian composer who had the most success in opera. According to Christopher Hailey, Schreker achieved an aesthetic of plurality in his work, with distinct idiosyncratic musical language, which Krenek undoubtedly inherited.[16] Schreker's opera *Der ferne Klang*, or *The distant Sound* (1910), is not only a good example of Schreker's aesthetic, but it can be argued that this work influenced Krenek in his construction of *Jonny*. To begin with, both composers wrote the libretto for these works, and each opera contains an autobiographical portrayal. In *Der ferne Klang*, the protagonist Fritz is a composer who leaves his childhood sweetheart in order to write a great piece of music in order to discover the so called 'distant sound'. His lover, Grete, is distraught and leaves for Venice to be a courtesan. Ten years later Fritz, not having found the distant sound, finds Grete, but the two part from each other once more. Five years later Grete is a common street walker and is rescued by a doctor. The doctor takes her to visit Fritz in his old age and the couple are final reunited. It is only then that Fritz realises that the distant sound has been within his reach all these years. He desperately tries to finish his opera, but dies in Grete's arms. It is not just the two composers within these two works who share similar struggles with modern culture; there are clear parallels between the two heroines. Like Anita, Grete is seduced by the bourgeois environment in which she finds herself, and she too strays from her lover by fraternising with other men. Peter Franklin has argued that the music of this opera functions as background scoring for a Hollywood film as it includes characteristics such as 'mickey-mousing', diegetic music, and the development of the meta-musical voice.[17] *Der ferne Klang*, like *Jonny* is a

[16] Christopher Hailey, 'Franz Schreker and the Pluralities of Modernism,' *Tempo: New Series*, No. 219, (Jan 2002): 2-7, JSTOR.
[17] Peter Franklin, 'Distant Sounds – Fallen Music: *Der ferne Klang* as 'women's opera'?' *Cambridge Opera Journal*, Vol 3, No. 2, (July 1991): 159-172, JSTOR.

montage of musical styles and according to Peter Palmer plays loose with the 'isms' of the age.[18] In the front of the score stage music is indicated as 'Gypsy music' and 'Venitian Music'.[19] This portrayal of the 'other', not only visually but musically can also be seen with Jonny and his jazz band. The concept of a 'distant sound' or even the 'invisible voice' is worth considering whilst analysing the radio scene from *Jonny.* When Max is on the glacier, distraught and ready to end his life, it is the distant sound of Anita's voice which awakens him. Both Max and Fritz find, for want of a better term, their inspiration from their intimate relationships as well as the nature that surrounds them. They are both thwarted by modern mass culture and demands of the masses. It is plausible that Krenek was influenced by this opera as he composed *Jonny spielt auf* and developed the themes further in order to modernise them for the *Zeitopern* of the 1920s.

In modern scholarship, *Jonny spielt auf* has received a moderate amount of academic attention. For example, David Drew comments on the conventional structure of the libretto and Krenek's Viennese knack for a catchy tune.[20] He also suggests that the opera presents conflict but provides no solution, and Krenek's music comes from a 'worried artistic consciousness' that is reflected in his portrayal of Max.[21] Susan Cook also gives a detailed analysis of the work, its thematic content, compositional style, the characters and its reception.[22] She acknowledges the differences between Max and Jonny as a central theme of the opera. For Cook the radio scene is significant, however not necessarily for its use of radio, but for its emphasis of the dichotomy between the musical styles of Max and Jonny.[23] She also points out that the Berlin performance on 19th October 1927 was broadcast on the radio.[24]

Christopher Morris on the other hand, examines the use of the glacier in the opera as an antithesis to the modern metropolitan world.[25] This is where Max feels most at peace. The glacier has its own motif, pure and modal. It is far removed from the music of Jonny and his jazz band. The importance of the glacier is also recognised by Nanette

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[18] Peter Palmer, 'Schreker's *Der Ferne Klang, Tempo: New Series,* No. 181, Scandinavia Issue, (June 1992): 63-64, 63, JSTOR.
[19]'Zigeunermusik' and 'Venetianischmusik,' Franz Schreker, *Der ferne Klang,* (Piano and Vocal Score: Vienna 1910).
[20] David Drew, 'Musical Theatre of the Weimar Republic', *Proceedings of the Royal Musical Association,* 88th Sess., (1961-1962): 89-108, 100, JSTOR.
[21] Ibid., 100-101.
[22] Cook: *Opera for a New Republic* (Rochester, 1988).
[23] Ibid., 86.
[24] Ibid.,104.
[25] Christopher Morris, *Modernism and the Cult of Mountains: Music, Opera, Cinema,* (Darnham, Surrey: Ashgate 2012), 2 and 8.

Nielsen. Her focus, however, is on the 'problem of freedom' within the work, where, as pointed out by Drew, Krenek provides no solution.[26] This 'problem of freedom' in *Jonny* relates to both individual and artistic freedom. Nielsen's philosophical approach to the opera connects it to contemporary writings of Paul Bekker and Karl Kraus. She notes that the radio scene is a turning point within the opera, not for its mediated sound, but for the symbol of freedom presented by the aria which is broadcast. She identifies Jonny as a modern 'Pied Piper', entrancing the audiences and leading them away from the true message of the opera.[27]

Peter Tregeor's study appears somewhat neutral, underlining the traditional notion of opera; opera is, on the whole, a genre created by the elite, for the elite, where the operatic stage acts as a defender and replicator of the idealist dreams of the mythical age. [28] His analysis is similar to Nielsen's approach, drawing upon the problem that Krenek intended to address in this opera and the significance of Anita. Tregeor claims that Krenek uses Anita to highlight that Max's grand illusions are out of touch, to thaw his soul, and to bring him back into reality.[29] This is clearly referring to the radio scene, where Anita appears to bring Max back to life by singing his music. Tregeor, like Cook and Neilsen, acknowledges the significance of the radio scene, highlighting it as a dramatic turning point and the critical weight it carries; the loudspeaker as a source of mass entertainment destroys the music's aura.[30] Tregeor is referencing the contemporary discourses here in understanding the problematic nature of radio in upholding German *Kultur,* which can be seen in essays from the mid-1920s in *Anbruch.*

This chapter will expand upon Tregeor's argument in showing the significance of the radio scene in terms of the materiality of the loudspeaker and audience behaviour. Morris, Taruskin and Nielsen have concentrated their research on *Jonny's* aesthetics, philosophy and the 'problem of freedom'. Nielsen's comment on the radio scene as a turning point is noteworthy and surely calls for an analysis in order to understand its significance. An analysis of this scene in terms of composition, set design and score directions, alongside contemporary texts on radio in the Republic, will shed new light onto this iconic *Zeitoper.* Additionally, it will further Rehding findings, as discussed in

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[26] Nanette Nielsen, 'Ernst Krenek's 'Problem of Freedom' in *Jonny Spielt auf*,' Twentieth Century Music, (10): 25-57.
[27]Ibid., 55.
[28] Peter Tregeor, ''Stadtluft Macht Frei': Urban consciousness in Weimar Opera,' in Nikolaus Bacht ed., *Music, Theatre and Politics in Germany: 1948 to the Third Reich,* (Aldershot: Ashgate, 2006), 237-254.
[29] Ibid, 247.
[30] Ibid, 249.

the first chapter, that radio was used in *Jonny* to motivate stylistic changes that characterise the style of Krenek's *Zeitoper*.[31] He also draws attention to audience behaviour, indicating that the hotel guest's behaviour mirrored that of Krenek's audience. It is clear then that the radio scene in *Jonny* has been recognised as important by musicologists, yet the use of the radio has often been ignored. Thus, it will present the radio scene as an exaggerated representation of radio discourses within Weimar musicology. Furthermore, the analysis will consider the concept of Entangled Media Histories, in order to place the opera within the context of media history, as well as to explore relationships regarding transmedia and materiality when examining the radio scene.

SCENE 7 – THE HOTEL TERRACE

In scene 7, Anita sings an aria which is broadcast over the hotel terrace by the means of a loudspeaker. It is clear that the loudspeaker represents a radio broadcast, as later in the scene the announcer of the jazz band tells the guests that they are listening to wave 510.[32] Hotel guests gather 'motionless' around the speaker, entranced by the beauty of Anita's voice. When the broadcast is interrupted by Jonny and his jazz band, the guests sing 'Thank God!' and eventually begin to dance.[33] This scene therefore does not simply portray the use of radio in a public space, but also exaggerates audience behaviour.

The scene begins with Max alone on the glacier. He is distraught after learning of Anita's night with Daniello and intends to throw himself off the mountain, yet the glacier rejects him and tells him that he needs to come to terms with the modern world. He is drawn back to life by the distant sound of Anita singing. Her voice is coming from a loudspeaker on the hotel terrace. In the score, Krenek writes a detailed description of how the he wishes the scene to be set:

> Die Hotelterasse wird allmählich etwas hell. Man sieht an drei bis vier beleuchten Tischen, gespenstisch unbeweglich, Hotelgäste bei drinks sitzen. An der Fassade leuchtet das Wort

[31] Alexander Rehding, 'Magic Boxes and Volksempfänger: Music on the Radio in Weimar Germany,' in Nikolaus Bacht ed., *Music, Theatre and Politics in Germany: 1945 to the Third Reich,* (Aldershot: Ashgate, 2006), 255-272, 264.
[32] Ernst Krenek, *Jonny spielt auf,* 150.
[33] Ibid., Stage Directions: 'Man sieht an drei bis vier beleuchteten Tischen, gespentisch unbeweglich, Hotelgäste bei Drinks sitzen,' 146; ‚Gott sei dank!' 150, and 'Hier fangen mache von den Gästen an, auf der Terrasse zu tanzen,' 151.

> ‘Palace’ auf. Etwas erhöht ist auf der Terasse ein ungeheurer Lautsprecher aufgestelt, in ein gespenstisch violettes Licht getaucht, so oft aus ihm etwas erklingt.
>
> The Hotel terrace gradually becomes bright. One can see three or four lit tables, where ghostly, immobile hotel guests sit with drinks. At the front, the word ‘Palace’ is lit up. Somewhat elevated on the terrace a huge loudspeaker is erected, immersed in a ghostly violet light whenever sound comes out of it. [34]

In these directions Krenek makes it clear that the scene should have a ghostly aesthetic. He indicates that the loudspeaker should light up, whenever sound comes out of it. At first glance it may seem that Krenek was aiming to draw attention to the loudspeaker as the key mediator within the scene, and in doing so highlight its materiality. Illumination of the speaker would have made it clear to the audience that the sound was coming through the speaker, especially to those sitting further away. The materiality of the loudspeaker in *Jonny* is undoubtedly important for the analysis of the radio scene, as Krenek adapts it for opera and uses it as a prop to simulate a radio experience. As there are no sources from the Leipzig premiere that discuss the construction of the loudspeaker, one must seek other sources.

The original sketch from the Austrian premiere (as shown by Figure 2) was composed using pastels on black paper, in order to show the illumination of the violet light clearly on the evening horizon.[35] It was designed by Oskar Strnad, an Austrian architect and theatre designer. The drawing is composed of a group of lit tables in front of a mountain back drop. The speaker is positioned between the terrace and the mountains (along with the word ‘Palace’), as if to act as a division between the two settings. With its mystical lighting and obvious prominence, one might assume that the loudspeaker is enticing them, yet further analysis may demonstrate a deeper complexity of radio simulation.

Figure 2: *Oskar Strnad, Bühnenbildentwurf: Jonny spielt auf, (31.12.1927), (Pastell auf Schwarzem Papier), from the Austrian Theatre Museum.*

[34] Ernst Krenek, *Jonny spielt auf,* (Piano and Vocal Score*:* Universal Edition, 1926), 150.(own translation), 146.

[35] Oskar Strnad, *Bühnenbildentwurf: Jonny spielt auf,* (31.12.1927), (Pastell auf Schwarzem Papier), from the Austrian Theatre Museum.

In 1930 Krenek wrote that his reasoning for using a loudspeaker on the terrace was to solve 'vast dramaturgical complications.'[36] It is important to the narrative that the audience are aware that it is Anita's *voice* that is bringing Max back to life.[37] Max is stationed away from the hotel on the mountain side, so a radio broadcast was a logical choice in achieving this dramatic effect, as it could feasibly carry Anita's voice to him. This is supported by Krenek's claim that he used technology in *Jonny* as a prop to show the drama of everyday life and that the objects were never presented as values in their own right, but as vehicles of dramatic action.[38] In the case of the loudspeaker, Krenek uses it to mediate Anita's voice and Jonny's jazz band, voices which are invisible to the audience and to the characters. As seen by Strnad's drawing, the loudspeaker appears to act as a physical divide between the hotel and the mountain yet connects the two worlds by broadcasting to both the hotel guest on the terrace and to Max on the mountains. Therefore, Krenek used radio in his opera as a dramaturgical mediator of the invisible voices of Anita and the jazz band. It is important to draw attention to the dramatic action which unfolds around the radio broadcast in this analysis, rather than placing the entire

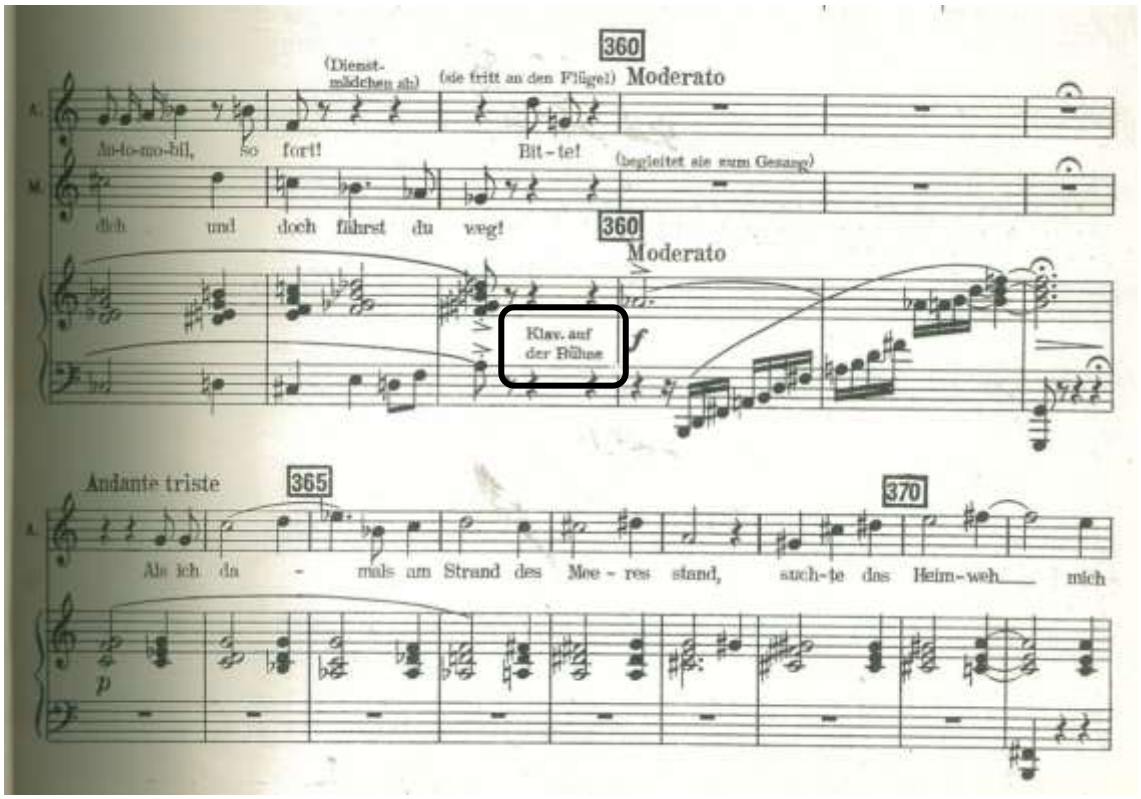
[36] Ernst Krenek, 'From Jonny to Orest' (1930) in *Exploring Music*, translated by Margaret Shenfield and Geoffrey Skelton, (New York: October House, 1966), 23-26, 23.
[37] Max's vocal line: **'**Welche Stimme? Welches Lied? Ist das der Wahnsinn? Was lockt zurück mich ins Leben? Sie singt mein Lied,**'** Krenek, *Jonny spielt auf*, (Piano and Vocal Score), 146-147.
[38] Krenek,'From *Jonny* to *Orest*,' 23.

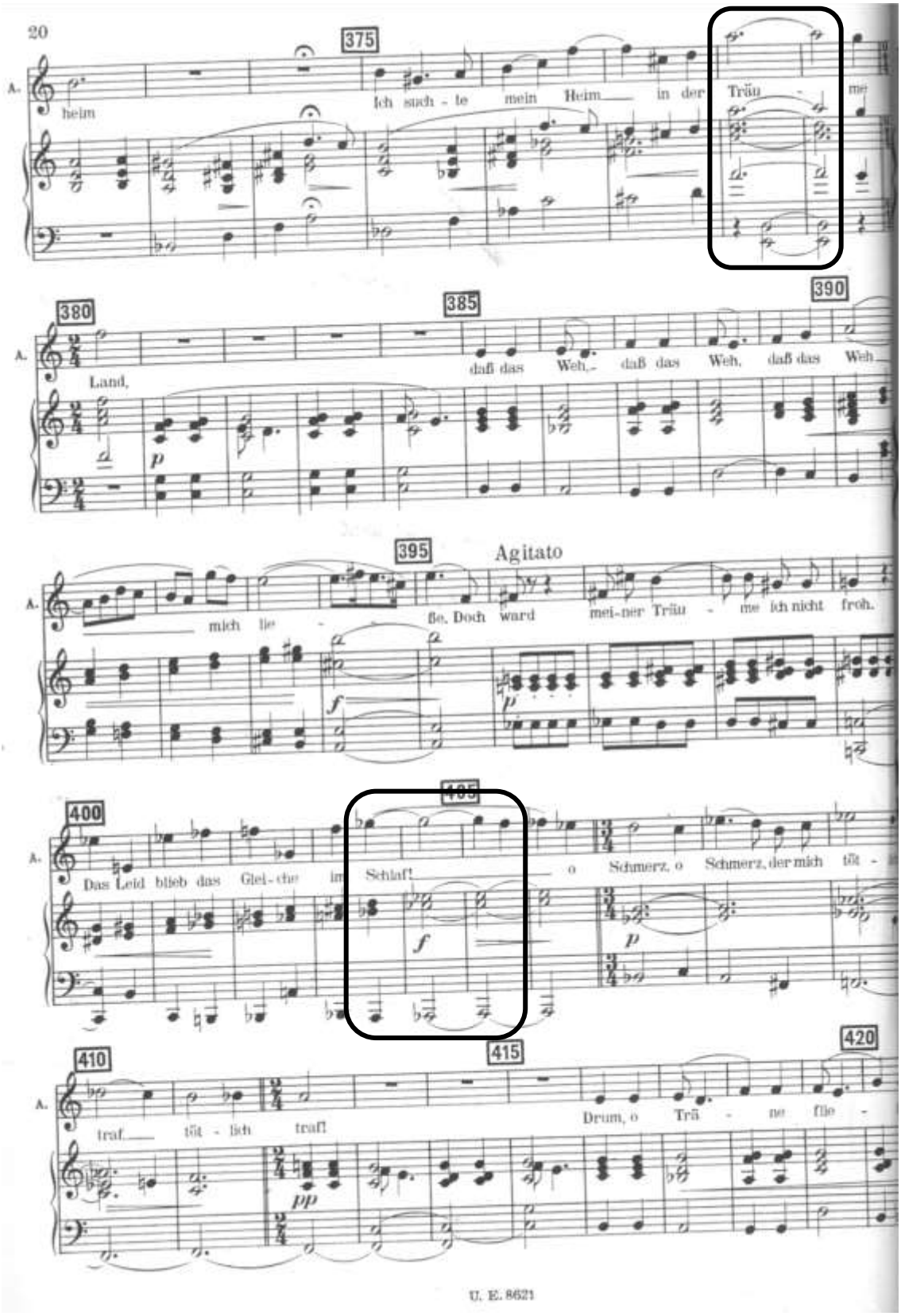
focus on the materiality of the loudspeaker itself. This chapter will now concentrate on what is broadcast over the hotel terrace, by the loudspeaker and Anita's voice, the aria *Als ich damals.*

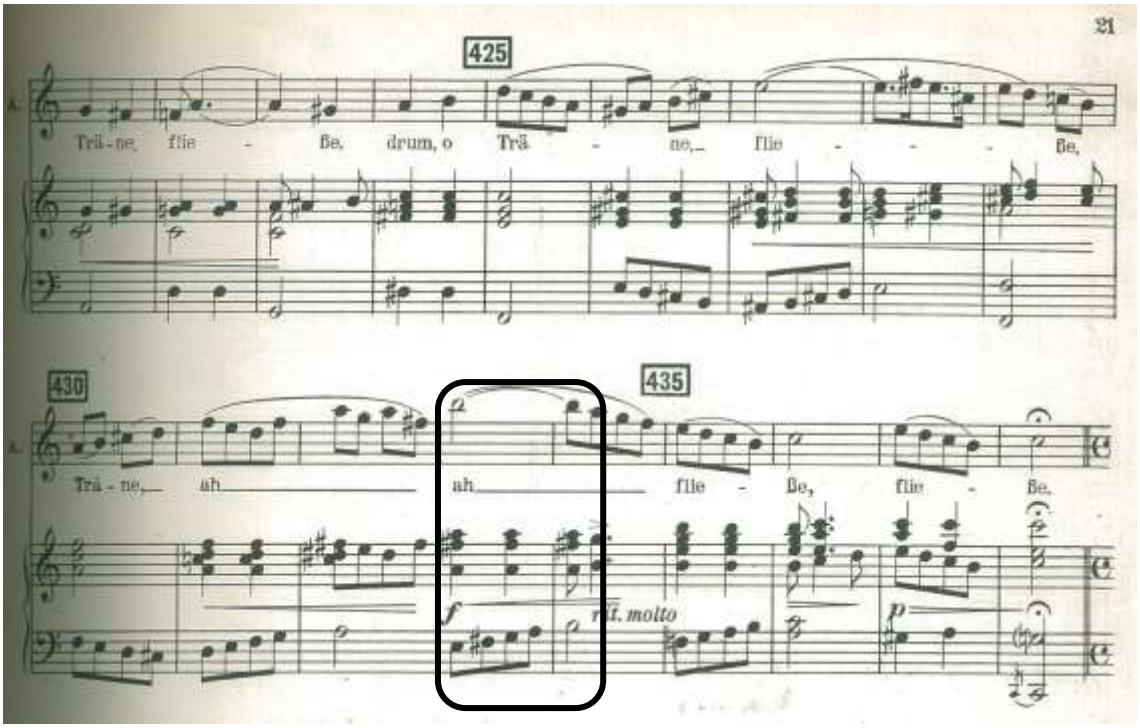
The aria *Als ich damals* is first introduced in scene 2. The score indicates that it is a work from one of Max's operas. The aria is filled with enharmonic shifts and is more sentimental than poignant.[39] Anita sings it in Max's living room accompanied by him on stage piano. At this point in the opera, Max and Anita are in a romantic relationship and are living together in Max's apartment. The aria contains chromatic points of anguish (see figure 3), which emphasises the emotional forces of conflict between the couple. Anita is about to leave for an operatic tour and this scene acts as the couple's parting song, emphasising the intimacy and distance between them. The song ends with Anita's manager telling her they must leave. This initial setting of *Als ich damals* emphasises both Max's relationship with Anita and his music, as well as providing a stark contrast to the radio broadcast of the same aria in scene 7.

[39] Enharmonic meaning notes that are equivalent but are 'spelled' differently (for example G and F#) Stewart, *Ernst Krenek: The Man and his Music,* 84.

Figure 3: *Chromatic points of anguish from scene 2 of Ernst Krenek's, Jonny spielt auf, (Piano and Vocal Score: Universal Edition, 1927), 19-21.*




20
375
A.
heim
Ich such - te mein Heim in der Träu - me
380
385
390
A.
Land,
daß das Weh, daß das Weh, daß das Weh
395
Agitato
A.
mich lie - ße. Doch ward mei-ner Träu - me ich nicht froh.
400
405
A.
Das Leid blieb das Glei-che in Schlaf. o Schmerz, o Schmerz, der mich töt -
410
415
420
A.
traf. töt - lich traf!
Drum, o Trä - me flie -
U. E. 8621



In scene 7 the hotel guests communicate their dislike for the aria and label *Als ich damals* as modern music.[40] Yet after further analysis, it could be argued that this aria is a historical montage, drawing on compositional techniques from the past, which are glued together by modernism (meaning techniques such as dissonance, rhythmic displacement and unconventional voice leading). To begin with, there are elements of *Als ich damals* which resemble characteristics of romantic German *Lieder.* Anita sings of standing on the beach with tears of loneliness and homesickness. This subject matter is typical to nineteenth century *Lied,* along with its solo piano accompaniment. For example 19th Century German composers often used the sea in their imagery, such as Schubert's *Meeres Stille* (1815) and Schumann's *Liebesfrüling* (1840). What is more, it was common for the performer of 19th Century German Lied to be concealed from the audiences as it was deemed to be less distracting, as people would concentrate on the physical movements of the singer, so screens, flowers, and walls were sometimes used to solve this problem.[41] During the radio scene, Anita is invisible to the audience, both the hotel guests and Max (and incidentally the theatre audience). This offers assistance in portraying Max's deep

[40] Krenek, *Jonny spielt auf,* 148.
[41] Edward F. Kravitt, 'The Lied in 19th Century Concert Life', *Journal of the American Musicological Society,* vol.18, no.2 (summer, 1965): 207-218, JSTOR.

connection with Anita and his music, a connection beyond the physical, which is initiated in scene two during the domestic setting of the piece.

In scene two, the piano is played on stage, giving the illusion of a domestic performance setting (Max's apartment). The song contains climactic points of anguish, for example bars 378, 405 and 433 (again, see highlights in Figure 2). This is another characteristic of romanticism. The undulating quavers which depict the words 'tears flow' are a clear use of word painting, a long standing technique within the classical tradition.[42] This final section also alludes to the Baroque period. There is a melody and accompaniment texture with occasional flowing counterpoint reminiscent of traditional continuo. The rhythm of the work is simple and traditional, so at first glance it does not suggest modernism, this is emphasised by the chordal nature of the piano. Additionally, in the coda section, the bass resembles a continuo, which is particularly reminiscent of the baroque continuo. Krenek is not alone in his use of past musical styles in the Weimar Republic. Paul Hindemith used neoclassical and neo-baroque styles in his music, in particular his *Kammermusik* (1921-1927). Weimar composers sought to renew the past and Krenek achieves this in *Als ich damals* by assembling traditional techniques with unnatural modulations, unconventional voice leading and a moderate amount of dissonant harmony.

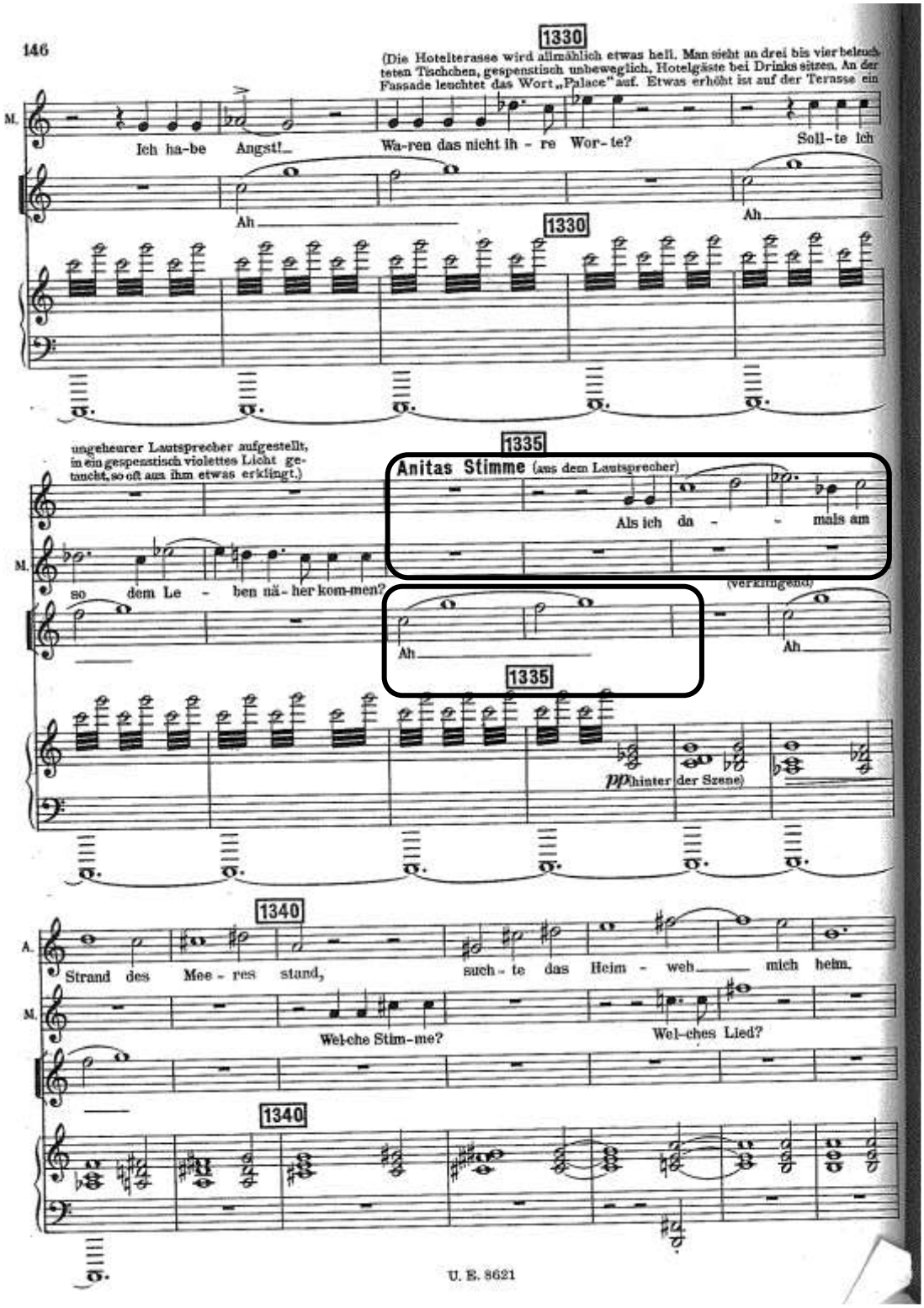
For the radio broadcast of *Als ich damals* in scene 7, the orchestra plays the initial piano accompaniment with Anita singing backstage. The original 3/4 time signature is augmented into 3/2, helping to distort the original setting of the aria. The chorus of hotel guests chant over the top of the broadcast. They seem entranced by the beauty of Anita's voice, but convey their dislike for her choice of song.[43] The vocal line suggests that guests are rejecting Max's modernist music. Yet if *Als ich damals* is a montage of German musical history, the guests are rejecting the past as well as modernism. In fact they are rejecting the past using a modernist device, as the notes they sing are creating further layers of dissonance to Max's music (this can be seen in the highlights in Figure 4). This echoes the other musical output during the Weimar Republic, where composers such as Arnold Schoenberg, Anton Webern, and Alban Berg, dismantled techniques of the past by creating new systems of musical composition that broke the boundaries of harmonic

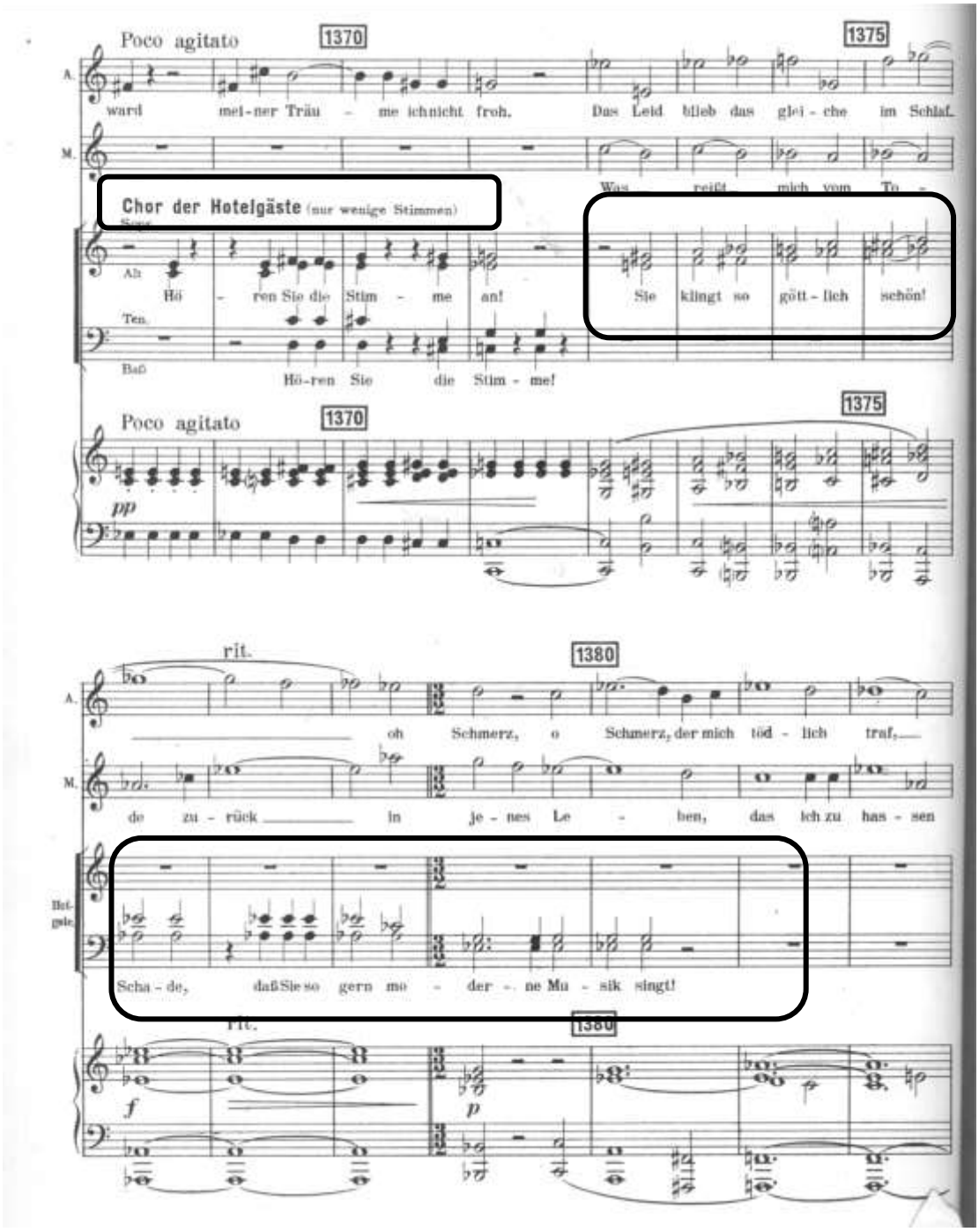
[42] Anita's vocal line: 'Träne fließe,' *Jonny spielt auf*, 21 (bars 425-438)
[43] Hotel guests' vocal line: **'**Sie Klingt so göttlich schön! Schade, daß Sie so gern moderne Musik singt! Und doch, wie sie's singt, meint man fast, es wäre Musik,' Krenek, *Jonny spielt auf*, 148-149.

and rhythmic convention.[44] The hotel guests believe they are rejecting modernism, yet seem unaware of their rejection of the past. This rejection is emphasised by their enthusiasm when Jonny and his jazz band interrupt Anita's performance, which is placed at the forefront of the scene.

[44] See: Robert Hill, 'Overcoming Romanticism: on the Modernisation of Twentieth Century Performance Practice,' in Brian Gilliam eds., *Music and Performance during the Weimar Republic*, (Cambridge: Cambridge University Press, 2005).

Figure 4: *Dissonance added by the hotel guests in scene 7 from Ernst Krenek's, Jonny spielt auf, (Universal Edition, 1927), 146-148.*





It is necessary here to refer back to Bekker's work in order to emphasise the significance of this broadcast. In *The Changing Opera*, Bekker noted the contemporary use of the female voice by opera composers as an attempt to rescue opera from its so called crisis:

> Everywhere the struggle goes forward against opera of sentiment, of emotional conflict, against the opera in which women's voice is prominent.[45]

In this scene Max is experiencing serious emotional conflict, which is both exposed *and* resolved by Anita's aria. Yet the dramaturgical choice of the loudspeaker removes the traditional opera diva from the stage, leaving her voice to be dominant. Her prominence however, is somewhat compromised by the behaviour of the hotel guests, as their hypnotic state can be seen to be making a mockery of the operatic diva; they cling to her voice without any real commitment to her or her message, yet her role is vital to Max's awakening. It is almost as if the hotel guests are bored by this stereotype. Bekker notes that the use of the female voice in *Zeitoper* is often applied as a mockery of its 'earnestness of expression'.[46] With this observation in mind, Krenek's radio scene can be viewed as a commentary on the problem of the female voice within modern opera, highlighting the issues raised by Bekker, yet offers no solutions, he merely allows the female voice to become lost over the airwaves, with no clear direction or destination.

The radio broadcast of *Als ich damals* is somewhat reminiscent of the first German radio broadcast of Heinrich Heine's 1825 poem, *Seegespenst*, which was broadcast from Berlin on 3 November 1923.[47] Not only is this poem an important part of German cultural memory, but it incorporates imagination, folkloric myth and romantic yearning. The poem depicts romanticised imagery, invoking the history of the radio as marine time communication. The narrative of the poem depicts the author gazing into the depths of the sea from the ship's bow, creating a hypnotic aesthetic, with foggy images which slowly come into focus. Gilfillan describes this gradual move towards visual accuracy as a depiction of awakening nostalgia and the tracking of the inner journey of the soul.[48] Not only do *Als ich damals* and *Seegespenst* centre their narratives on the sea, but their delivery results in hypnotic imagery for the audience, both physical and imagined (the 'physical' audience in *Jonny* are those sitting in the opera stalls, where the imagined are the hotel guests). The hotel guests appear to be hypnotised by Anita's voice coming out of the loudspeaker, but they seem oblivious to the song's narrative. This comparison to the broadcast of *Seegespenst* highlights the debates of early radio broadcasting and the relevance of romantic nostalgia.

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[45] Bekker, *The Changing Opera*, 283.
[46] Ibid.
[47] Daniel Gilfillan, *Pieces of Sound*, 22.
[48] Ibid., 25-26.

Jonny was by no means an isolated example of technology and media on the Weimar opera stage, nor is it an isolated example of the use of media technology to communicate opera within media history. The hypnotic behaviour of the hotel guests is mimicked in Werner Herzog's West German film, *Fitzcarraldo* (1982). The surrealist film documents the journey of Fitzcarraldo and his voyage on the steamship in order to access a rich rubber territory in the Amazon. This film uses materiality in a similar way to *Jonny* in order to represent audience behaviour and fascination in new technology. There is a scene where Fitzcarraldo turns on a gramophone for a group of native children, who seem fascinated by the turning machine and its intriguing speaker.[49] The children appear captivated by the machine itself, rather than the music which is being mediated. Richard Leppert has commented on this scene by stating that Fitzcarraldo's smiles indicate his belief that it is the aria which has them so captivated.[50] These children are behaving in a similar way to the hotel guests in *Jonny;* they are still hypnotised by the technology which to them is completely new. What is more, the gramophone is mediating operatic scenes which were shown as staged earlier in the film. Again, this is similar to *Jonny* where the audience is presented with two types of performance of the same material. The difference between these two portrayals of mediated sound however is that *Fitzcarraldo* presents a more realistic representation of early sound technology. The aria sounds distant and you can hear the tinny, crackling sounds, and turning of the gramophone whilst being presented with close up shots of the device. Yet in *Jonny*, the representation of the mediated sound appears unrealistic, perhaps even enhanced in order to hypnotise the hotel guests. Leppert notes that the technology, especially the gramophone, in *Fitzcarraldo* reflects the social agency of technology and that culture serving technology seems to trump nature, appearing to have authority over it, and is symbolised by the gramophone's presence at the boat crash.[51] This concept also appears in the radio scene in *Jonny*, where radio technology is placed into a natural setting (the glacier) and exposes Max's inner conflicts of conforming to modern mass culture or staying true to his love of the glacier. In the end the radio technology triumphs as he is rejected by the glacier and slowly drawn into the modern metropolitan world.

[49] Werner Herzog, *Fritzcarraldo,* (Filmverlag der Autoren, 1982), Film, 16:00-17:00.
[50] Richard Leppert, *Aesthetic Technologies of Modernity, Subjectivity and Nature: Opera, Orchestra, Phonograph, Film,* (California: University of California Press, 2015), 64.
[51] Ibid., 64-65, 67.

When Anita is interrupted by Jonny and his jazz band, the stage directions indicate that the hotel guests begin to gyrate and by the end of the jazz section they are dancing on the terrace.[52] This implies the guests are not used to hearing jazz on the radio, and that the music represented by the glacier, German modernism or 'serious' music, was a regular occurrence on the radio, and jazz, or 'light' music, was a considered a rare relief. This scene then, raises the question of whether the hotel guests in *Jonny* represented a wider Weimar audience in their reactions to music programming. In the Weimar Republic the radio was both a medium for the home and for public spaces, and *Jonny* presents examples of both public and private listening. The public listening represented by the hotel guests in this scene indeed raises the question as to whether Krenek was consciously representing the wider listening public of Weimar Germany, or merely the views of his contemporary critics.

JONNY AND THE REPRESENTATION OF RADIO IN WEIMAR GERMANY

Scene 7 of *Jonny* provides an example of both public and private listening, where the private is symbolised by Max and the public by the hotel guests. Max displays an intimate relationship with the music, but the hotel guests appear hypnotised by Anita's voice but show no real understanding to the music. Strnad's set design showed that the loudspeaker was placed between the hotel and the glacier, however this does not just portray a physical divide on the stage, but also an intellectual one between Max and the hotel guests.

Christopher Hailey believes radio in Germany was a tool for dissolving political borders and revolutionised concepts of space.[53] He also points out that radio served as a mediator of the moment and had a sense of mystery, where the listener was physically removed from the sound.[54] This is shown in *Jonny spielt auf* where Krenek presents *Als ich damals* as both a live performance and as a radio broadcast, contrasting the intimate setting of a domestic performance to the ghostly aesthetic of the radio broadcast. Hotels in the Republic often broadcast jazz bands.[55] This can be seen clearly in *Jonny spielt auf,* emphasised by the guests' reaction. It is precisely this reaction that shows us that these

[52] Krenek, *Jonny spielt auf,* 150-151.
[53] Christopher Hailey, 'Rethinking Sound: Music and Radio in Weimar Germany', in Brian Gilliam eds., *Music and Performance during the Weimar Republic,* (Cambridge, Cambridge University Press, 2005), 14 and 22.
[54] Ibid., 23.
[55] Karl Christian Führer, 'A Medium of Modernity? Broadcasting in Weimar Germany 1923-1932', *The Journal of Modern History,* Vol.69, No.4, (Dec 1997): 722-753, 746, JSTOR.

public jazz broadcasts were popular in the wider republic, providing an important source for historians in understanding the Weimar public sphere.

Krenek's presentation of *Als ich damals* as both a live performance in scene 2 and as a radio broadcast in scene 7, not only contrasts the intimate setting of a domestic performance to a public radio broadcast, but the ghostly aesthetic of the radio broadcasts indicates its relationship to the dead. Radio's link with the metaphysical was a common assumption of early radio broadcasting. As the wireless meant that the boundaries of time, space, notion and body no longer seemed to apply.[56] Jeffery Sconce argues that radio carried out reminders of individual alienation.[57] In *Jonny*, Max is alone on the mountain, hearing the radio in the distance. This seems to bring him back to life, as he sings of sudden warmth rushing through his blood.[58] This seems to contradict the ghostly immobile listeners on the hotel terrace. Their hypnotic trance is in line with Sconce's narrative of the relationship between the wireless and telepathy.[59] Furthermore, Stern's article in *Anbruch* on the haunted radio is noteworthy here.[60] Stern highlights the localisation of musical space that the loudspeaker presents. He notes the unique nature of musical space that the radio creates, where music from the loudspeaker becomes localised, as one can move from house to house and hear the same music through different loudspeakers, thus creates a distorted experience of public listening. Stern clarifies the uncanniness of this experience:

> Erschreckend hört er die bellende Leinwand des Tonfilms und die doppelgängerhaften Stimmen des Radio. Stehet er ausdrücklich fort, so entsteht programmatische Humanität. Bekennt er sich aber zu ihnen, versucht er sich, dem schreck zu entwöhnen, dem unmäßigen innerlich sich anzumessen dem Unterhörten zu entsprechen, und gelingt dieser Versuch, so wird er selbst unmenschlisch.
>
> Frighteningly, he hears the barking screen of the sound film and the echoing voices of the radio. If he is extinct, then programmatic humanity arises. But if he confesses to them, he tries to escape the fright, to face the inordinate inwardly, to comply with the unseen, and if this attempt succeeds, then he himself becomes inhuman.[61]

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[56] Jeffrey Sconce, 'The Voice from the Void: Wireless, Modernity and the Distant Dead', *International Journal of Cultural Studies,* vol.1 (2), (1998): 211-232, 214, JSTOR.
[57] Ibid., 216
[58] Krenek, *Jonny spielt auf,* 149.
[59] Sconce, 'The voice from the void,' 225.
[60] Günther Stern, 'Spuk im Radio,' *Anbruch*, (1930/2), 65-66.
[61] Ibid., 66.

In *Jonny* the guests are fixed to the spot transfixed by the echoing voice of Anita, they are hypnotised, or in Stern's words, 'complying with the unseen', therefore they are dehumanised and appear as ghosts on stage. These echoing voices are not only shown by the ghostly aesthetics of the loudspeaker and the hotel terrace, but also through Max's inner struggle. At this particular moment of the opera Max is distanced from Anita both physically and emotionally. The loudspeaker carries Anita's voice to him, yet creates a greater distance between them. The dramaturgical decision to use a radio broadcast as part of the performance of this scene then, emphasises Max's vulnerability as well as his musical intelligence by contrasting his behaviour with that of the hotel guests.

Furthermore, in the radio scene the hotel guests stare motionless at the loudspeaker, implying passive listening behaviour. The question of audience engagement is complex and in some ways even immeasurable, yet Weimar critics feared such passive behaviour represented by the hotel guests. As radio was making its way into everyday life in the Weimar Republic it is tempting to label it as a product of mass culture. It was noted that scholars contested the idea of radio as a mass medium in Weimar Germany. This is not just due to its expense, but its choice of programming as pointed out by Führer, who identifies that variety was not a strong point in Weimar broadcasting with dance music restricted until the late hours, and the proletariat generally seemed to dislike 'serious' music. [62] Max represents the left-wing musical intellectual, a 'serious' musician, thoughtful and critical of the world around him. This is in contrast to the hotel guests, who represent the German bourgeoisie, of whom Brecht was highly critical. He was concerned that radio would be forgotten, that the bourgeoisie would drive it into being obsolete, rather than supporting artistic experimentation.[63] Krenek's hotel guests therefore, can be seen as a garish representation of the bourgeoisie, where their ghostly aesthetic is presenting the nightmare of many critics and composers of the Weimar Republic. A line from the hotel manager emphasises this interpretation. When the jazz band finish playing, the light on the speaker goes out and the hotel manager points to it and says what a nice change it makes (implying the jazz music) and one can't just stare at the glacier all day, and therefore echoing the guests' reaction to Jonny and his jazz band.[64] He is not just talking about the physical view of the mountains but the modernist music the glacier

[62] Karl Führer, 'Medium of Modernity? Broadcasting in Weimar Germany 1923-1932,' *Journal of Modern History*, vol.69, (Dec 1997): 722-753. JSTOR.
[63] Gilfillan, *Pieces of Sound*, 98.
[64]Hotel Manager's vocal line: 'Schön, daß man das zur erhorlung hier hat! Den ganzen Tag kann man doch nicht den Gletscher anschau'n.' Krenek, *Jonny spielt auf*, 151-152.

represents. It is also noteworthy that this is the first time someone on stage acknowledges the loudspeaker, yet although he appears to be pointing to the loudspeaker; it is the music which is being criticised.

In contrast, it can be argued that rather than presenting a caricature of the bourgeoisie, the hotel guests represent a middlebrow audience. The term 'middlebrow' began to appear in early 20th Century publications and can be defined as a middle between so called highbrow and popular culture. In an unsent letter to *The New Statesman* in 1932, Virginia Woolf described the middle brow as a person of 'middle-bred intelligence', who desperately want to be acknowledged and crudely mix art and life as a means of achieving their desired fame and fortune.[65] Studies of the middlebrow have mainly concerned literature, but the concept of the middlebrow and their behaviour is making its way into musicology. For example Joan Rubin's study on the middlebrow includes an in depth history of the Book of the Month Club and its transmedia nature as its music series expanded into the medium of radio.[66] By 1939 the dissemination of classical music in America had expanded. Public music libraries were regarded in same manner as books, where many so called great works were available in public libraries. This prompted the Book of the Month Club and its release of phonograph records in order to promote classical music appreciation. These records were to promote engagement and enjoyment, where side A contained the music and side B an analysis. The idea of opera on the radio then, can be seen as another method of educating this so-called 'middlebrow', and Krenek's hotel guests could be a crude representation of this; exposing the commercialism of middlebrow culture and their lack of engagement with artistic material.

Not only did the invention of recorded sound lead to the dissemination of opera to a wider audience; it transformed the experience of the opera singer. The phonograph record meant that artist could record tracks with the potential to be played worldwide, which enabled opera stars to become more famous than ever before. Recorded sound enhanced the careers of singers such Enrico Caruso. The tenor was born and died in Naples in February 1973, rising to stardom from a poor family, progressing from singing in cafes to worldwide opera houses.[67] In 1910 Caruso gave his first public radio broadcast

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[65] Virginia Woolf, 'Middlebrow,' *The Death of Moth and other Essays*, (1932), http://sydney.edu.au/arts/slam/downloads/documents/novel_studies/sem1_2016/reading1_1.pdf, (Accessed 28/02/18).

[66] Joan Rubin, *The Making of Middlebrow Culture*, (North Carolina: University of North Carolina Press, 1992).

[67] Pierre V. R. Key, *Enrico Caruso: A Biography*, (Boston: Little, Brown and Company, 1922).

live from the Metropolitan Opera House. Opera therefore, was expanding its means of dissemination from the phonograph record to the radio as the technology developed on both a national and global level. Caruso continued his worldwide fame until he died in 1920. Another example of an early 20th Century opera celebrity is Dame Nellie Melba, an Australian singer and the daughter of the appointed commissioner of the London Colonial exhibition. Melba debuted as an opera singer in 1887 and toured Europe, America and Australia.[68] She began recording in 1904, releasing over 100 records which helped establish the gramophone and in 1920 she became the first international artist to participate in direct radio broadcasts.[69] So on exploring the character of Anita in Jonny, she appears to represent this new emerging celebrity in the 1920s, not just in the radio scene, but throughout the opera. She is seduced by the lifestyle fame will give her and uses radio technology to assist in her quest for stardom. Singing the aria with her lover in the intimate setting, though emotional and powerful, is not enough for her, so Anita leaves for the big city. The concept of opera celebrity is enhanced further by the guests' admiration for her voice rather than the music she is singing. The hypnotised hotel guests grouped around the loudspeaker as if it were an altar, appearing mesmerised by Anita's voice emphasise her celebrity status. Nevertheless, this scene shows awareness of the concept of opera celebrity and how it impacted on listening behaviours during the Weimar Republic.

Radio's ability to communicate art relies on the listener as much as it does the artist or the broadcaster. The idea of the listener as the decoder calls for the listener to be active and educated in the arts, the opposite of Krenek's hotel guests. Gilfillan's interpretation of Hans Flesch may also throw light on this discussion. [70] In recognising Flesch's views of the importance of sound film, Gilfillan highlights that he praised the sound film for its optical sound recording, its engagement with issues of sensationalism and his suggestions for critical listening practice.[71] In *Jonny,* sensationalism is addressed by Jonny and his music, which is intended to arouse the listeners, who have no concern for authenticity. Therefore the behaviour of the hotel guests is not so much a criticism of the so called 'passive listener' as it is of radio programming. Gilfillan sums up the struggling relationship between listening behaviours and radio programming by highlighting the

[68] Jim Davidson, 'Melba, Dame Nellie (1861-1931),' *Australian Dictionary of Biography*, vol. 10, (MUP, 1986): http://adb.anu.edu.au/biography/melba-dame-nellie-7551 (Accessed 17/07/2017).
[69] Ibid.
[70] Daniel Gilfillan, *Pieces of Sound*, 65.
[71] Ibid., 78.

conflicts in listener demands; whether radio should broadcast harsh realities of life, or the lulling metrics of poetry.[72] These are clearly represented by Anita and Jonny retrospectively, highlighting the underlying discourses in Weimar radio programming. Music played a key role in Weimar broadcasting, and just as the loudspeaker carried Anita's voice to Max, Weimar radio transmitted opera further than previously possible.

The hypothesis that radio democratised classical music, placing it within the grasp of those to whom it had previously been inaccessible was famously criticised by Theodor Adorno.[73] In 1941 Adorno stated that the technical limitations of radio meant that a symphony was reduced to a 'chamber symphony' when broadcast over the ether and the surrounding quality of the music was lost. Radio did not have the capacity to convey the vast complexity of a Beethoven symphony and communicate its vast dynamic range. It is appropriate to apply Adorno's writing about the symphony to opera as firstly because a symphony, like opera, is to be experienced as a whole work. Also, the opinions stated in this article regarding the symphony echo Adorno's other publications.[74] Adorno stated that listeners of the 'Radio Symphony' were simply waiting for a key motif and nothing more.[75] In *Jonny spielt auf*, the hotel guests are waiting for the cadenza of the aria, and are not immersing themselves in the sound world of the music, just the sound quality of Anita's voice.[76] They are unimpressed with the music being broadcast. Therefore Krenek is presenting a physical model of what Adorno later theorised, especially as Adorno writes:

> To 'enter' a symphony means to listen to it not only as to something before one, but as something around one as well, as a medium in which one 'lives.' It is this surrounding quality that comes closest to the idea of symphonic absorption.[77]

The radio then, creates a barrier to this surrounding quality, placing distance between the performers and their audience. In *Jonny* the radio is not just creating a gap between Anita and the hotel guests, but also between Anita and Max. However Max enters into the music, whereas the guests do not.

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[72] Ibid., 81.
[73] Theodor Adorno, 'The Radio Symphony: An Experiment in Theory,' (1941), in Susan H. Gillespie Trans. and Ed. *Essays on Music Theodor W Adorno,* (California: University of California Press, 2002), 251-269.
[74] See Adorno, *Essays on Music,* in particular 'On the Social Situation of Music', (1932), 391-436 and 'The Curves of the Needle,' (1927), 271-276.
[75] Adorno, 'The Radio Symphony', 264.
[76] Hotel guests' vocal line: 'Still! Still! Jetzt kommt die Kadenz!' Krenek, *Jonny spielt auf,* 149.
[77] Adorno, 'The Radio Symphony' 257.

The analysis of *Anbruch* in the previous chapter suggests that certain instruments were not suited to the microphones due to their frequencies going beyond the capabilities of the technology. For example, Warschauer's 1926 essay in *Anbruch* discussed the problems which the early technology had in conveying musical works, where the quality was lost before it reached listeners.[78] The following year, Adorno argued that the female voice in particular sounded shrill and incomplete when technologically reproduced.[79] Later in 1930 the American critic R. Raven-Hart claimed experimental work was necessary in order to fix compositional issues raised by the technical limitations of radio.[80] This, however, does not appear to be the case in *Jonny spielt auf* as the hotel guests are singing about the beauty of Anita's voice. They do not complain that the radio is diminishing her performance or that it makes her sound shrill, implying that Krenek is presenting a utopian vision of this new technology.

Another example of this so called 'utopianism' can be seen later in the scene where Daniello claims to recognise his Armati violin when he hears Jonny play it in his radio performance, claiming he can recognise it with just one note.[81] The discussion in the previous chapter suggests that this is an unrealistic concept and a romanticised portrayal of the capabilities of early radio. It is important to note, however, that Daniello represents an accomplished musician and this is what enables him to pick out the violin when he hears it on the radio. What is more, the hotel guests appear to have no real musical understanding. This is shown by their naïve comments on Anita's voice, their lack of understanding to *Als ich damals* and its historical origins. Instead they latch onto the simplistic jazz music. Krenek therefore, is not presenting a utopian view of radio, but can be seen as critiquing mass culture, or a middlebrow audience, who display little understanding of the technical limitations of radio supported by their lack of knowledge of the music it mediates. Therefore Krenek's *Jonny* contributes to both opera and media history narrative, not only due to its appropriation of radio to solve dramaturgical complications, but for the range of listening experiences it simulates.

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[78] Frank Warschauer, 'Musik im Radio,' *Anbruch,* (1926, 8-9): 374-379.
[79] Theodor Adorno, 'The Curves of the Needle,' (1927), Leppard's trans., *Theodor Adorno: Essays on Music,* 271-276, 274
[80] R. Raven-Heart, 'Composing for Radio', *The Musical Quarterly,* vol. 16, no.1, (Jan 1930), 133-139, JSTOR.
[81] Krenek, *Jonny spielt auf,* 154-155.

CONCLUSION

This chapter has shown how *Zeitoper* can be considered an entangled medium by using Krenek's *Jonny spielt auf* as a case study. Ernst Krenek used radio broadcasting in *Jonny spielt auf* to act as a dramaturgical mediator, so Anita's voice would appear to be heard in the distance by Max. Yet it is not hearing the radio broadcasting his work which awakens him, but Anita who is singing it. The material nature of the speaker in this scene cannot be ignored and the fact that Krenek intended the loudspeaker to be a prop to represent the invisible voice does not diminish the significance of the scene within the context of radio broadcasting within the Weimar Republic, as the scene represents both public and private listening experiences. Krenek's detailed stage directions indicate that the scene should have a ghostly aesthetic, where the loudspeaker is to be illuminated whenever sound comes out of it. This does not highlight the materiality of the radio, but is reminiscent of the contemporary debate of early radio's connection with the dead. The reaction of the hotel guests to *Als ich damals* shows their lack of understanding of, or engagement with 'serious' music. This aria can be interpreted as a montage of the musical past, yet the guests label it as modern music, rejecting it in favour of jazz. Thus the hotel guests are rejecting the past with modernism, mimicking the wider musical debate during the Weimar Republic, as their voices add extra dissonance to Max's montage of German music history. The hotel guests, unlike Max, display little understanding of the aria and seem to display minimal engagement with the music. Therefore, the behaviour of the hotel guests can be seen as an exaggerated representation of audience behaviour. They appear passive and uninterested in the music which is mediated, appearing hypnotised, only snapping out of their trance when Jonny and his jazz band begin to play. This representation of listening bluntly presents the debate of 'passive listening' as theorised by Theodor Adorno, and in turn reflecting the concerns of the earlier attitudes of *Anbruch* contributors towards radio.

Chapter 4

Interlude: Max Brand's *Maschinist Hopkins* as a Prelude to Radio Opera

Max Brand's *Maschinist Hopkins* was Germany's first factory opera. The work premiered at the *Allgemeiner Deutsche Musikverein* festival in Duisberg in 1929. The festival consisted largely of operatic repertoire, with other contributions such as Schoenberg's *Der Gluckliche Hand.* The festival's selection committee included the composer Alban Berg, who highly commended *Maschinist Hopkins* during the selection process, and stated that the work fulfilled the relationship between modern life and opera.[1] This opera was the festival's main hit, was voted the best operatic work of the year, and had a subsequent 120 performances in 37 opera houses in the 1929-1930 season. Like *Jonny*, *Maschinist Hopkins* appealed to the German population due to its montage of musical styles and in particular its appropriation of jazz and light music. Yet the nature of Brand's construction of this work pushes operatic boundaries beyond the capability of *Jonny*, as rather than incorporate modern technology and media as props or dramaturgical solutions, the machine becomes the very essence of the drama and the performance incorporates media techniques, rather than mimic media production. The purpose of this chapter therefore, is to show how *Maschinist Hopkins* acts as an interlude between Krenek's *Jonny* and Goehr's *Malpopita,* in realising the potential of operatic production through new media such as film and radio, paying particular attention to Brand's use of the so-called 'invisible voice'.

INTRODUCTION TO MASCHINIST HOPKINS

Max Brand was an Austrian composer, born in 1896 in Lemberg. Like Krenek, he studied under Frans Schrecker, whom he followed to Berlin in 1920. In 1924 he moved back to Austria, where he wrote music for communist revues, and worked alongside Hans Eisler in film studio composition.[2] This might explain the left-wing themes running throughout the opera. *Maschinist Hopkins* consists of a prelude and three acts. These acts are divided into twelve pictures, as indicated on the title page of the score. This use of the word

[1] Clive Bennett, '*Maschinist Hopkins:* A Father for Lulu?' *The Musical Times,* vol.127, no.1722, (Sept 1986), 481-484, 481, JSTOR.
[2] Erica Scheinberg, *Music and the Technological Imagination in the Weimar Republic: Media, Machines and the New Objectivity,* (PhD Thesis submitted at the University of California, 2007), 98.

pictures rather than scene is the first indication of the opera's association with cinema, and suggested that it can also be viewed as a film score. The prelude begins in an industrial town. The audience see Bill leave a working class bar to ask his mistress, Nell, for the key to her husband Jim's factory so he can learn its secrets and seek his fortune. The two then visit the factory and take the secret from the factory floor. They are discovered by Jim, and as they fight over Nell, Bill pushes Jim under the machinery, and the machines leap into life and crush him. Act 1 begins seven years later, where Bill has applied the secret formula to make his empire. He sacks the worker Hopkins for not warning him about the unrest within his workforce. Hopkins, however, believes that the workers should have better conditions. Meanwhile Nell informs Bill of her desire to enter showbiz and they go out to a night club where she signs her showbiz contract. Bill buys all the factory shares, which plummet, and the act ends with a love duet. Act two begins with workers gossiping that their factory owner murdered his mistress' husband. Hopkins decides to blackmail Nell in order to seek revenge on Bill for sacking him. He gets a new job as a follow-spot operator at the theatre where Nell now performs. He corners her in her dressing room, forces the truth out of her and makes her agree to go away with him. Bill's world begins to crumble, and he finds out that Nell has been unfaithful to him. By Act 3 Hopkins has left Nell and she has become a prostitute. In the same working class bar from the Prelude Bill hears two men discussing a prostitute, who turns out to be Nell. Bill leaves and again makes his way to Nell's house where she is entertaining a client. In his rage Bill murders her and returns to the factory. As he tries to short circuit the system, Hopkins intervenes and Bill falls under the machinery, which sings with Nell's voice, and the workers assemble once more on the production line. The opera then, goes full circle and the workers continue their routine, undisturbed by the murder which they have just witnessed. A detail synopsis of this opera can be found in the Appendix.

Waldemar Weber, in his review of the premier in the journal *Anbruch,* argued that it was the greatest success that the Duisburg stage had seen in ten years.[3] Weber answers the question of the opera's success by stating that rather than employing the 'props from the past', the opera fully embraces the contemporary, and was full of drama and action.[4]

[3] Waldemar Weber, 'Uraufführung in Duisburg, Max Brand: Maschinist Hopkins' *Anbruch*, (1929/5), 223-225, 223.

[4] 'Und dazu ein Theater, das nicht mit den verbrauchten Requisiten der Vergangenheit arbeitet, sondern aus dem Fundus der Gegenwart mit vollen Händen Schöpft. Alles an ihr und ihr ist Geschehen, ist Handling! Ist Drama!', Ibid.

He compares the opera to a sound film script, highlighting Brand's awareness and influence of cinema:

> Sein Libretto ist der Extrakt eines Filmdrehbuches im besten Sinne des Wortes; die ganze Oper schreit danach, tongefilmt zu werden. Zwölf Bilder in kapitelweise epischem Ablauf, stets weschelnde, oft krass weschelnde Schauplätze, Gestaltung der dramatischen Vorgänge aus dem Visuellen, ein Jagen in den stets sich änderen Situationen und Stimmungen...
>
> His libretto, in the best sense of the word, is the very essence of a film-script; the whole opera screams to be filmed. Twelve pictures in broken, epic sequence, always shifting, often crassly shifting, the dramatic events, a chase in the ever-changing situations and moods…[5]

Weber's dynamic description is certainly visible in the score. The detailed stage directions at the beginning of each 'picture' clearly indicate these changing moods and constant shift in drama, be it by lighting, scenery or movement. These directions give a clear sense of space, both on and off stage, enabling this work to be seamlessly transferred to the screen, Weber also implies here that the concept of *Bewegung* is not only imitated by the factory set up on the stage, but in the very nature of the operatic delivery. Thus, opera by the end of the 1920s appears to move beyond mere technological props, but began to integrate technology and into its production, or to use Brand's own terminology, 'stage-processes'.[6] Brand did not just provide opera a facelift, but revolutionised its core foundations. Thus, this innovative operatic construction is the necessary step towards media opera, where opera must absorb the distinctive techniques of the new media which mediate it, rather than merely representing them on its surface, such as the extension of performance space and the implementation of the so-called 'invisible voice'.

This opera has received a moderate amount of academic attention within musicology. Clive Bennett has described *Maschinist Hopkins* as a 'father for Lulu' by highlighting its influence on Berg and stating that Nell's journey to prostitution and her influence on Bill is comparable to Berg's *Lulu* (1935).[7] Bennett points out that Brand not only personifies the machine, but presents them as powerful masters, with humans submitting to their mechanical power. He argues effectively that Nell began as a symbol of freedom, which was later destroyed. This symbol of freedom differs from the glacier

[5] Ibid.
[6] As discussed in chapter 3: Brand, 'Mechanische Musik und das Problem der Oper,' *Anbruch,* (1926/8-9), 356-359.
[7] Ibid., 487-484.

in *Jonny*, as Bill unlike Max, turns to a Nell for fulfilment rather than nature. Nell and the glacier are polar opposites, yet provide the driving forces for the men in their lives.

In contrast, Frank Mehring pays particular attention to the use of machines in the opera, stating that it included techniques of Expressionism, *Neue Sachlicheit* and Americanisms.[8] Mehring highlights the role of the machine choir is one of judgement and the altar-like representation of the factory switch board, underlying the religious connotations within the opera. He concentrates on the complex presentation of machine within this work with reference to *Mechanische Musik*, emphasising the evolving relationship between man and machine, and the notion of dehumanisation of the workers submitting to their mechanical masters. He presents *Maschinist Hopkins* as a concrete example of Weimar *Zeitoper*, in its portrayal of the machine as a threat to human beings. In contrast, Susan Cook challenges the idea of *Maschinist Hopkins* as *Zeitoper*, stating that it lacked its stereotypical comic nature.[9] Rather than the representation of the machine, Cook concentrates on the opera's jazz scene. Both authors seem to agree that the rather sinister subject matter is far removed from the nature of *Jonny*, an evolution of the *Zeitoper* genre perhaps, acting as a bridge between *Zeitoper* and epic opera.

Erica Scheinberg also comments on the personification of the machines; they are hungry and vicious beings.[10] She discusses the character Nell and her unusual status between human and machine. Scheinberg highlights the personification of factory machinery when Nell is murdered by Bill, and she becomes the voice of the machines.[11] The incarnation of the machine shows that as well as being revolutionary, the machine was identified as a threat to humanity, and there was an underlying fear of the dominance of the machine, and the development of the cyborg. Not only does *Maschinist Hopkins* deal with personification of the machine, but also its feminisation in the Weimar Republic. Scheinberg argues that this represents the fear of the female body, and the horror of a man engulfed by the machine and being born again is the ultimate technological fantasy.[12] This appropriation of technological fantasy is the key theme of this work, alongside its clear critique of capitalism. *Maschinist Hopkins* is not as

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[8] Frank Mehring, 'Welcome to the Machine! The representation of Technology in the *Zeitopern*,' *Cambridge Opera Journal*, Vol. 11, No.2, (July 1999), 159-177.
[9]Susan C. Cook, *Opera for a New Republic: The Zeitopern of Krenek, Weill and Hindemith*, (Rochester: University of Rochester Press, 2010), (Originally published in 1988 by UMI Research Press), 176.
[10] Scheinberg, *Music and the Technological Imagination*, (2007), 102.
[11] Ibid., 105.
[12] Ibid., 118.

successful in evoking critique within a working class consciousness as *Malpopita,* due to their asymmetrical juxtaposition of music and machine.

It is clear that the machine has been a focus within current scholarship on *Maschinist Hopkins.* Mehring has highlighted the montage representation of the machines and their sinister nature, whereas Scheinberg has paid particular attention to their voice, their personification and feminisation. These studies have recognised the cinematic techniques in this opera, they have realised Brand's implementation of radio techniques in his composition, in particular his appropriation of human voice, treatment of space and invisibility. This analysis of *Maschinist Hopkins* then, aims to build upon the work of these scholars in order to understand how Brand pushed the boundaries of opera and his construction of machinery, which showed his understanding of them as producers rather than simple reproducers of music. It will also act as a fascinating comparison to Krenek's *Jonny,* showing a more sophisticated representation of the machine, and a more advanced understanding of media techniques of music production, rather than media production. It will also serve as a prelude to the following chapter that discusses Goehr's *Malpopita,* as *Maschinist Hopkins* introduces the genre of factory opera, as well as providing the foundation for future media opera. It will act as a comparison too for *Malpopita,* enhancing the analysis of Goehr's audio techniques for a factory aesthetic, compared to Brand cinematic portrayal of the machines.

THE MACHINES

The analysis of the factory scenes in Brand's *Maschinist Hopkins* will not only assist the understanding of Brand's realisation of the machine, but also undoubtedly show the application of his ideas in *Mechanische Musik und das Problem der Oper*.[13] Here, Brand demanded an operatic reform, calling for opera to align itself with modern technological processes. He identified the problem of aligning mechanical music to manually operated stage processes. This is avoided in *Maschinist Hopkins* by the personification of the machine, where mechanical sounds are produced by the orchestra and the human voices.

The first indication of this personification is the page entitled, *Personen,* which appears at the beginning of the score. Here all the characters are named and assigned their voice type. As well as the main characters (i.e. Jim, Bill and Nell), there is a section named *Unsichtbare Stimmen* or 'Invisible voices', which are the intended voices of the

[13] Ibid.

machines.[14] The first 'invisible' voice indicated is Quelle (Hauptschalter) or, the source of the switchboard. Quelle represents the very heart of the machines, the source of all their power. At the end of the opera, Quelle sings with the voice of Nell, haunting Bill of her murder and emphasising further the personification of the machines. Other *Unsichtbare Stimmen* are indicated as 'Spokes', 'Wheel', 'Rhythm', 'Wave', 'Gears', 'Pistons', and 'Speaking choir'.[15] These mechanical voices are not only invisible but are instructed to be *Sprechtimmen,* separating them from the 'real' people, but emphasising their mechanic and uncanny nature. This idea of the 'invisible voice' can be seen to be exploring media performance techniques, such as the invisible voice of the radio, or the off screen voice of the cinema. These invisible voices play an important part in the aesthetic for the factory scenes in pictures 2, 6 and 12. Brand's use of the 'invisible voice' will be explored in more detail in the next section of this chapter.

Brand, like Krenek, was meticulous in his scenery descriptions. At the beginning of every picture, there is a detailed narrative of the scene setting. The second picture is set on the factory floor at night, when Bill and Nell steal the factory secrets from the safe. In the score Brand writes:

> Maschinenhalle bei Nacht. Gegen den lichteren Hintergrund (Glas) heben sich gigantische Maschinen, wie phantastische Fabelwesen ab. Links Plattform, von der eine Eiserne Wendeltreppe zur Bühne herabfürht. Rechts ebenfalls eine Plattform, auf der oben die Hauptschalttafel angebracht ist. Zu dieser Plattform führt eine Eisentreppe. Hin und da blinkt ein glatter Mettallteil nackt, wie ein bösartiges Auge auf. Beim Aufgehen des Vorhangs is die Bühne vollkommen dunkel. Nur der Hintergrund leuchtet schwach und bläuish.
>
> Factory (machine hall) by night. Gigantic machines, like fantasy mythical creatures, stand out from a lit (glass) backdrop. From the left platform, an iron spiral staircase descends to the stage. On the right there is also a platform, where the main switchboard is mounted. An iron staircase leads to this platform. Now and then a bare, smooth metal part flashes, like a malicious eye. At the rising of the curtain the stage is completely dark. Only the backdrop shines stark and blueish.[16]

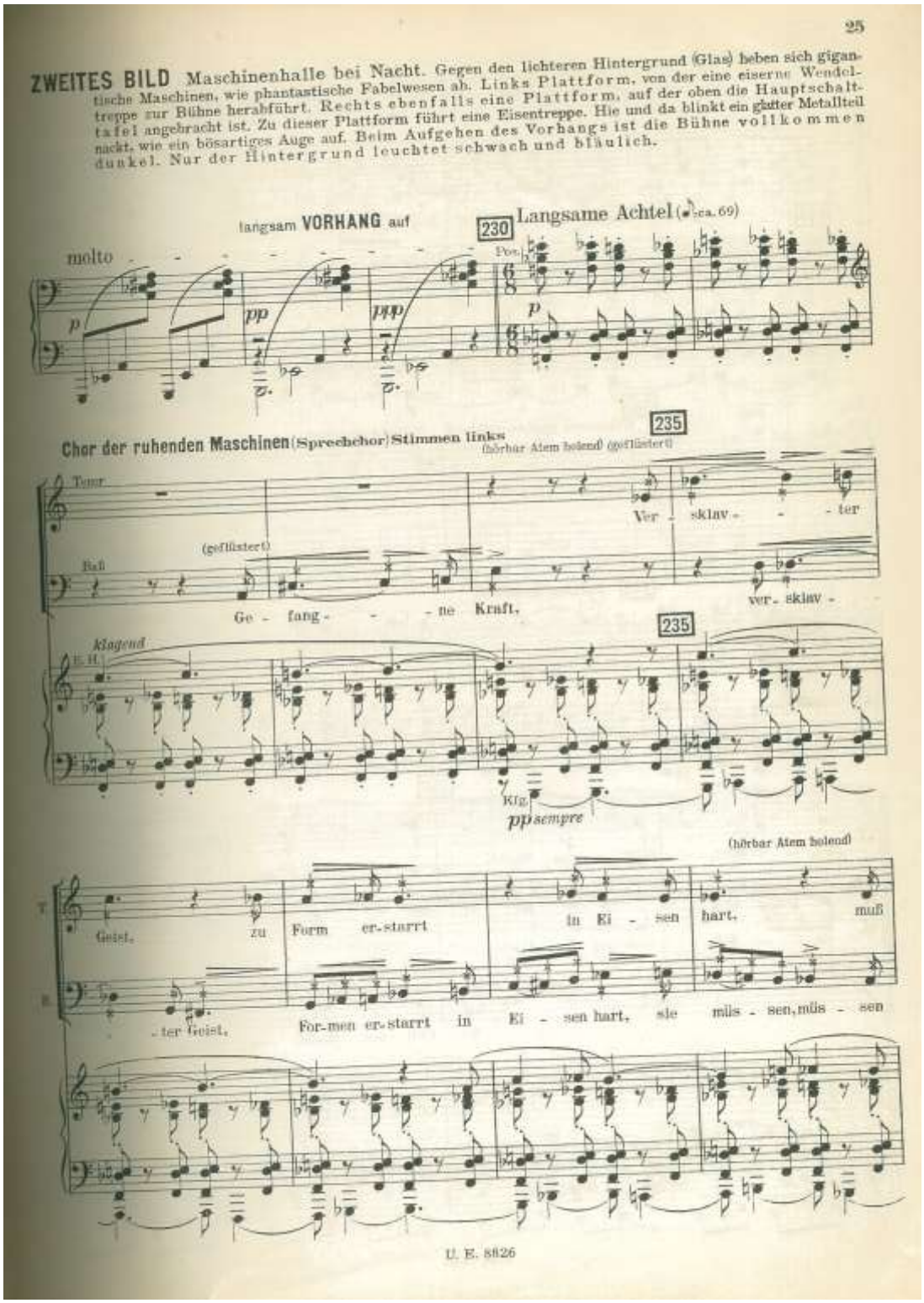
Even before the action starts, there is personification of the machine. The audience know straight away that the machines are watching over the factory and anticipate them coming

[14] Max Brand, *Maschinist Hopkins: Oper in einem Vorspiel und drei Akten (Zwölf Bildern) Op.11,* (Piano and Vocal score, 1928), 3.
[15] 'Spieche, Rad 1, Rad 2, Reimen, Welle, Zahnräder, Kolblen, Srechchor,' Ibid.
[16] Ibid., 25. Erica Scheinberg also translates this passage in her thesis. We have slight differences in our translations however, as my translation for example tends to enhance the poetic detail of Brand's instructions of the factory set up.

to life. The action begins with the chorus of dormant machines. The accompaniment is a quiet 6/8 staccato pattern, creating a sly atmosphere comparable to Grieg's *Hall of the Mountain King* (1875). The voices are instructed to sing from the left and right, creating a sense of antiphony.[17] The machines sing of their weariness by repeating words to imitate a conveyor belt, highlighting the repetition of their work. The machine choir is instructed to sing in the manner of *Sprechmelodien* (speech melodies).[18] They appear prisoners to human enslavement; a fate which is reversed by the end of the opera. As they complain of weak bands, loose bolts, and hard tracks, the layers of voices build in chromatic patterns, climaxing on the word 'oil', where there is a strong dissonant chord with a solo soprano line. What is more, the semiquaver triplets in the flute and clarinet create a sense of urgency (which can be seen in Figure 5).[19] It is almost as if oil is a drug and they are desperate to get their next fix. It seems to strike up madness within them, alerting the audience to their inner power, acting as a warning of their threatening dominance.

[17] An antiphonal texture is where more than one group of instruments or voices, usually placed in different areas of a particular space. There is often dialogue between the two groups and musical ideas will be passed between them.
[18] Brand explains that he requires the performers to study the directions in Arnold Schoenberg's *Pierrot-Melodramen* and *Glücklichen Hand.* The parts of 'Sprechmelodien' are indicated by cross symbols of the note which is explained at the start of the score.
[19] Brand, *Maschinist Hopkins*, 29.

Figure 5: *Max Brand, Maschinist Hopkins (Zwölf Bildern) Op.11, (Piano and Vocal Score, 1928), 25.*



Scheinberg's analysis of this scene discusses the use of film technology, asserting how flickering faces, with the accompanying off stage voices, give life to the machines.[20] She also highlights Nell's ability to sense the fanatical, as she can hear the machines whisper and her terror.[21] There is also a sense of a judgement from the machines here. When the machines hear Bill and Nell approaching they warn each other to be quiet. They observe the drama on the factory floor. It is as if they are ghosts on the factory floor, offering their opinions on the unfolding drama. As Bill and Nell discuss their plans the machines sing 'they are afraid, they are afraid.'[22] The machines are sensing human emotion, not only highlighting their personification, but their potential power over humans. It is as if they are looking for human weaknesses in order to dominate, and they see fear as a weakness in Bill, which they remember in the final scene. Furthermore, the machines act as a prompt for the audience, acting as a commentary for the action on stage, assisting the dramatic atmosphere. The machines then, have their own unique role in the opera, both as characters and dramaturgical mediators.

Furthermore, the aesthetic which Brand constructs is highlighting impending death. At the end of the scene Bill and Jim get into a fight and Bill is devoured by the machines. Brand is clearly identifying the machines with horror and death, which is achieved both through visual and sound effects. This ghostly atmosphere in this scene is somewhat reminiscent of the radio scene from *Jonny,* yet it is not people who are ghosts watching the machines, but the machines are ghosts watching the people. This comparison emphasises the metaphysical view of the machine within this opera. Even without the score descriptions of lighting and the words 'fantasy creatures', these aesthetics are achieved by the music and in particular the *voices.* This recognition of the power of the human voice for dramatic delivery becomes even more vital when dealing with radio performance (which will become clear in the following chapter on Walter Goehr's *Malpopita.*) This imagery does not only correspond with the dominance of machinery in the modern work place, but also they represent the new media technology which loomed over society, posing a dormant threat to traditional musical practice.

In contrast to picture 2, picture 6 at the beginning of act 2 (which can be seen in Figure 6), captures the factory by day, so naturally the scene begins with a chorus of workers, split into groups of men and women. A discussion of this scene is vital to the

[20] Scheinberg, *Music and the Technological Imagination*, 99.
[21] 'Sie früchten sich,' Brand, *Maschinist Hopkins,* 42-43.
[22] Scheinberg, *Music and the Technological Imagination*, 102.

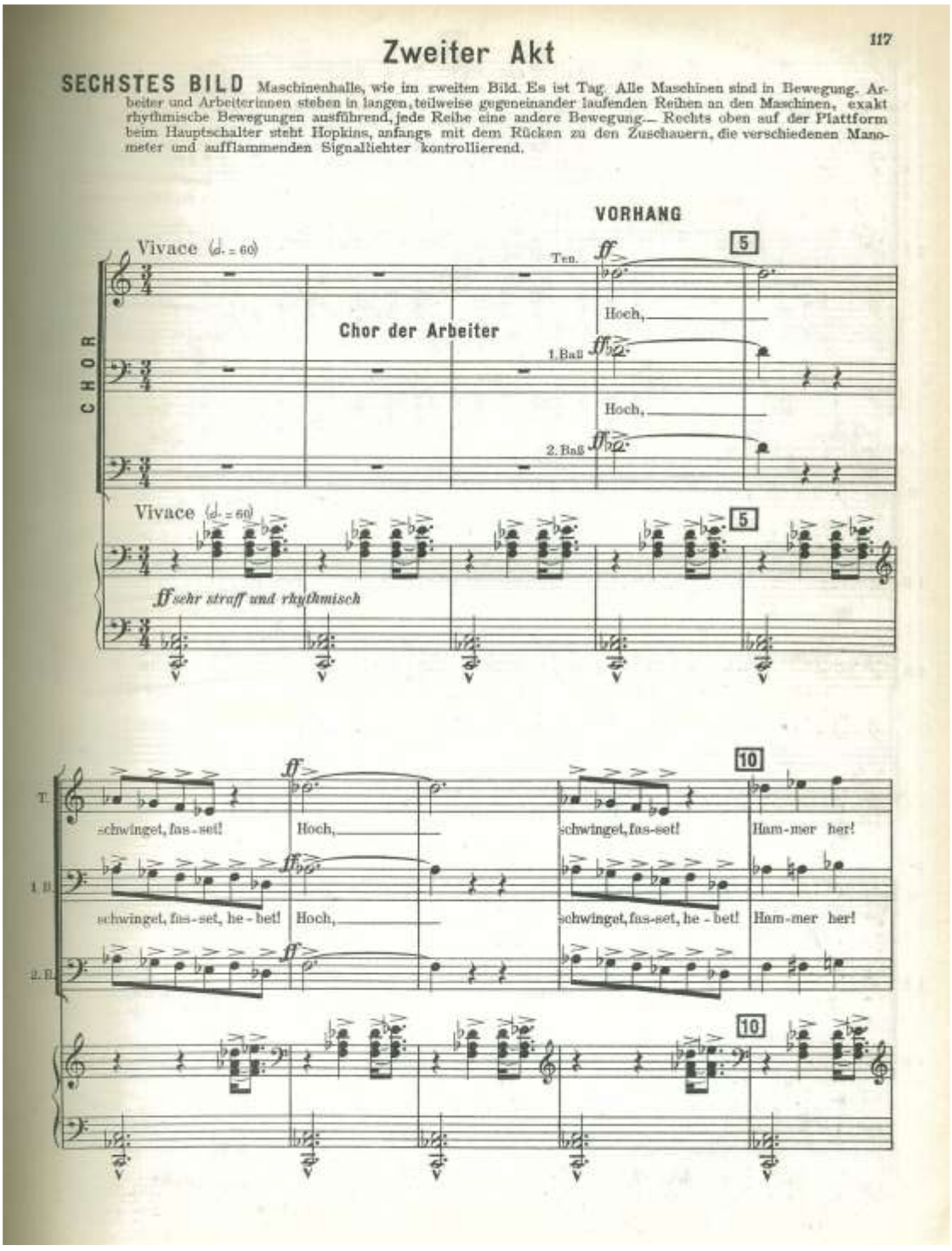
analysis of *Malpopita,* as it treats the work force in a similar fashion, where the techniques used by Brand are enhanced by Goehr in order to portray a factory aesthetic in a purely audio form. Once more Brand outlines the construction of the stage clearly at the beginning:

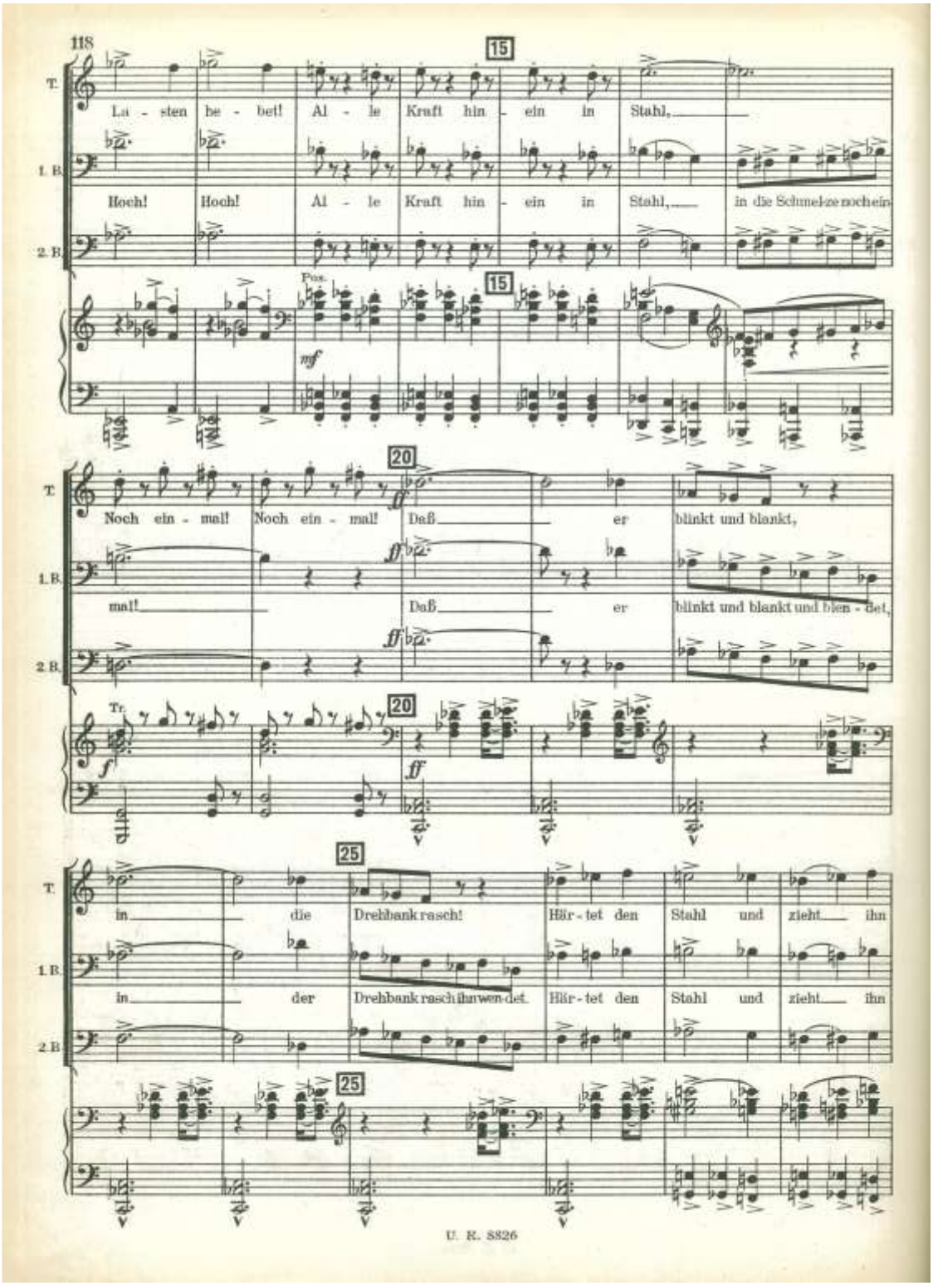
> Maschinenhalle, wie im zweiten Bild. Es ist Tag. Alle Maschinen sind in Bewegung. Arbeiter und Arbeiterinnen stehen in langene, teilweise gegeneinander laufenden Reihen an den Maschinen, exakt rhythmische Bewegungen ausführend, jede Reihe eine andere Bewegung.- Rechts oben auf der Plattform beim Hauptschalter steht Hopkins, anfangs mit dem Rücken zu den Zuschauern, die verschiedenen Manometer und aufflammen Singnallichter kontrollierend.
>
> Machines, as in the second picture. It is daytime. All the machines are in motion. Male and female workers stand in long rows at the machines, moving in opposite directions, carrying out exact rhythmic movements, each row a different movement.- Right, on the platform by the switchboard, Hopkins stands, initially with his back to the audience, controlling the various manometers and blazing signal lights.[23]

What is striking here is that Brand instructs two choruses, separating the male and female workers. Not only are they represented visually, but also through sound. Both choruses sing in an ironic waltz fashion, creating a flourish of sound, in false celebration of factory life. Yet each chorus sounds stereotypically as one might expect; the men sing fast, aggressive, and accented notes, loud and strong, whereas the women sing softer, lighter, staccato notes with a smaller note range, somewhat timid in comparison to the men. Accented percussion and a syncopated rhythm accompany the male chorus, where a piccolo solo underpins the women. This not only emphasises the difference in gender here, but echoes the Viennese waltz of the 19th century, but the dance hall has been replaced by the factory. The concept of *Bewegung* or 'constant movement' is also emphasised by the choice of music, the modernisation of the waltz implies fast ongoing movement.

[23] Brand, *Maschinist Hopkins,* 117.

Figure 6: *Max Brand, Maschinist Hopkins (Zwölf Bildern) Op.11, (Piano and Vocal score, 1928), 117-118.*





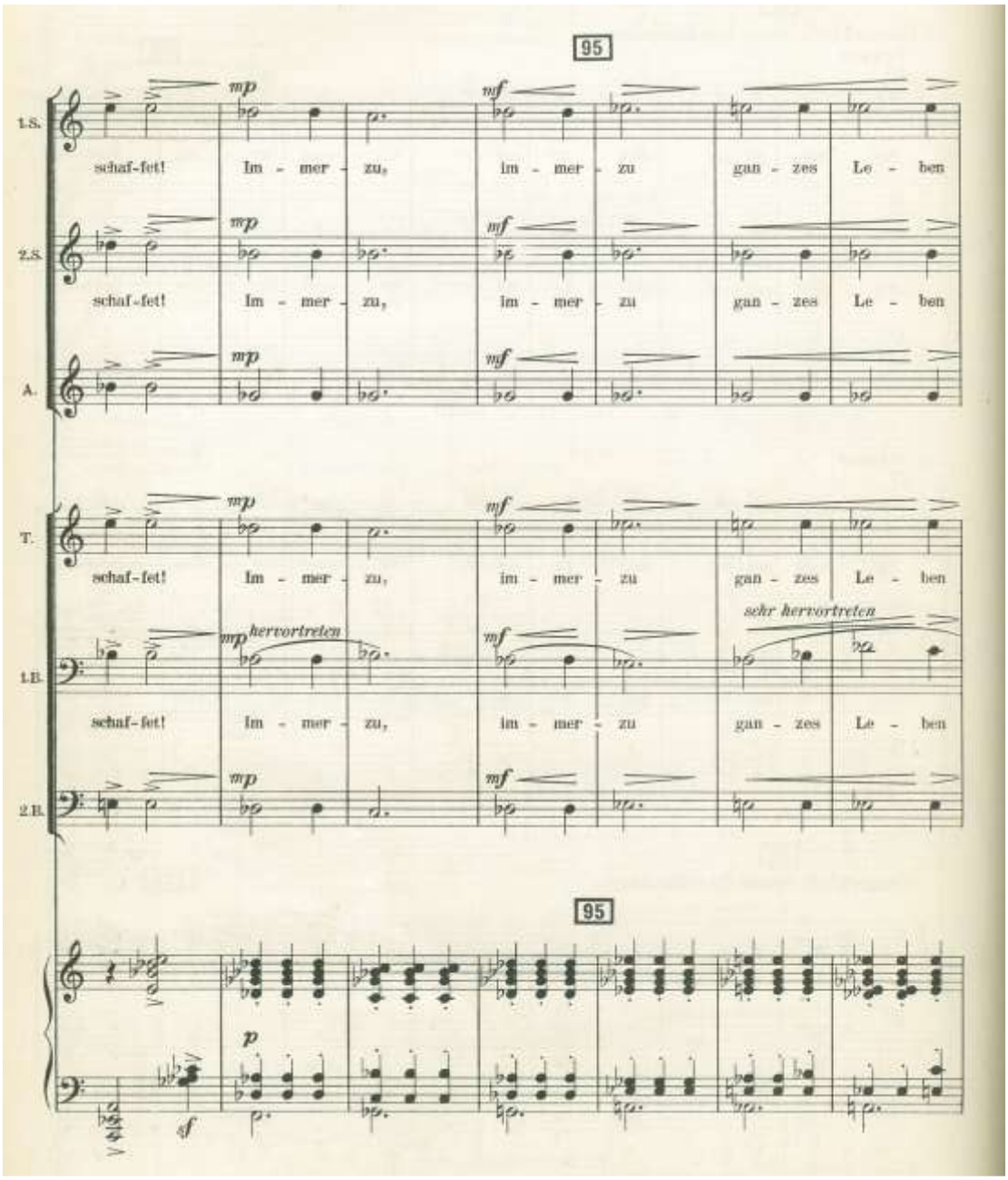
Additionally, the workers are arranged on the stage as a series of production lines. This Fordian symbolism was often imitated in Weimar art (for example the tiller girls during the cabaret movement). This visual rhythmic synchronisation is somewhat at odds with the flowing style of a waltz and its 3/4 time signature, emphasising once more the

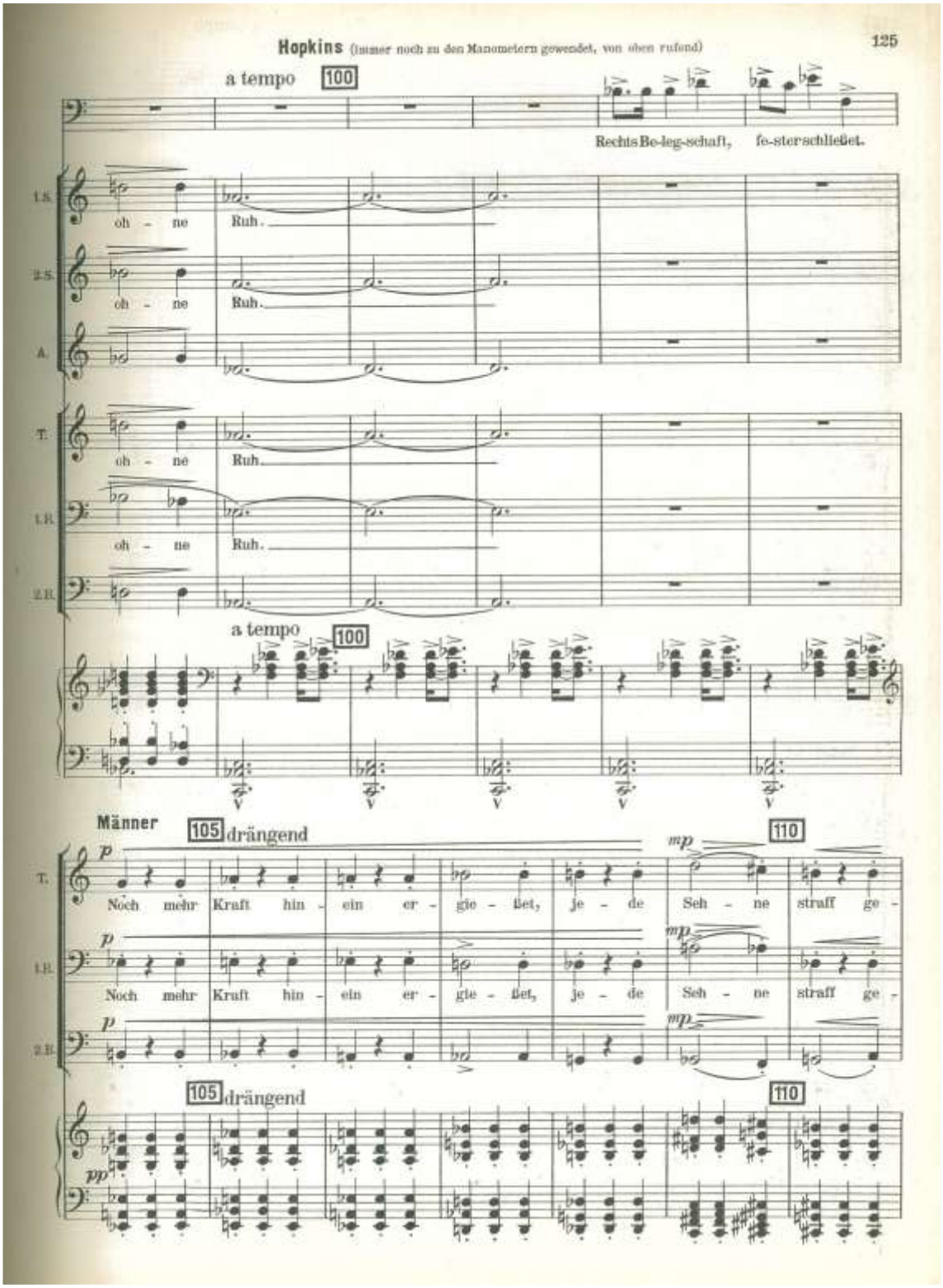
personification of the machine and the dehumanisation of modern society. It is also noteworthy that the machines are silent at present, seemingly submitting to the workers, and it is the workers voices then which imitate the machinery with the orchestra. The words of the chorus speak of constant work and no play, grotesquely emphasising the reality of the modern factory, thus putting romanticism firmly in its place with cruel irony in their waltz.

This climactic section ends with 'Always, always the whole life without peace.' (This can be seen in figure 7).[24] This emphasises one of the key messages of the opera; work must continue no matter what. The opera returns to this theme at the end, where the workers continue to work even though Bill has been devoured by the machines right before their eyes. After this climactic moment, Hopkins begins to sing for the first time, he is still at the switch board, instructing the workers from above, shouting at them to work harder, imitating the harsh capitalist boss, whose only concern is economic efficiency.

[24] Ibid., 124-125.

Figure 7: *Max Brand, Maschinist Hopkins (Zwölf Bildern) Op.11, (Piano and Vocal score, 1928), 124-125.*





The factory hall is also the setting for the final scene, where once more a human, this time Bill, is devoured by the machines. There is once more a detailed description at the beginning of the picture:

> Maschinenhalle bei Nacht, ähnlich wie im zweiten Bild, jedoch mit folgenden wesentlichen sichtbar werden. Die Hauptschalttafel. Von beiden Seiten führt je eine Eisentreppe hinauf. Trotz aller Sachlichkeit soll die Konstruktion der Hauptschalter und ihres Aufbaues symbolhaft und alterig wirken. Es ist vollkommen dunkel in der Halle. Ein einziger Mondsrahl, durch die Querstäbe des Glaskuppelbaues durchbrochen, wirft sein magisches Licht auf den Hauptschalter, der wie ein Tabernakel glitzert. Das ganze bild ist vollkommen unrealistisch. Der sanft leuchtende Glashintergrun und die phantastischen Umrisse der Maschinen, erhöht durch die leuchtende Wirkung des Hauptschalters, sollen eine Verschmelzung von Maschinenhalle und Tempel vermieten.
>
> Machine hall by night: similar to the second picture, but with the following substantial differences: The people are arranged so that large sections of glass backgrounds become visible to the viewer. The main switchboard is built high over the middle of the background of a pyramid-shaped iron construction. An iron staircase leads up from each side. Despite all objectivity, the construction of the switchboard, in their symbolic effect, should appear altar-like. It is completely dark in the hall. A single moonbeam penetrates the crossbars of the glass domes, throwing a magical light on the main altar, which glitters like a tabernacle. The whole picture is completely unrealistic. The soft, luminous, and glass background and the phantasy silhouettes of the machines, enhanced through the illuminated effect of the switchboard, it should convey a fusion of factory and temple.[25]

What is striking about this description is the religious imagery it constructs. The main switch board is to become an altar, worshipped by the workers and finally dominating them. The design of this final scene is not only 'completely unrealistic' but is a collapse from *Neue Sachlichkeit* to Expressionism. Scheinberg notes that in this scene Bill can hear the machines for the first time, and he begs them for help. She states that 'The anthropomorphic machines articulate a complex array of emotions and desires, from fear and loathing, to hunger, revealing their capacity to think and feel more like human beings than inanimate objects.'[26] This final scene then, is when the emotions of the machine are fully realised, enhanced by 'Quelle' now being sung by Nell, to haunt Bill by reminding him of his crimes. The embodiment of Quelle sings in a fully operatic voice. This is the first time a machine voices sings in this way, leaving the technique of *Spreschtimme* behind. The heart of the machine is fully liberated, its potential unleashed, at last ruling over the humans who once oppressed her.

The scene ends with Hopkins pushing Bill under the machines, the same fate which Jim met in the second picture. The opera has gone full circle, just like the cogs of the machine. This is emphasised by the workers continuing their monotonous work, despite the horrific events. Nothing has changed since the beginning of the opera for the

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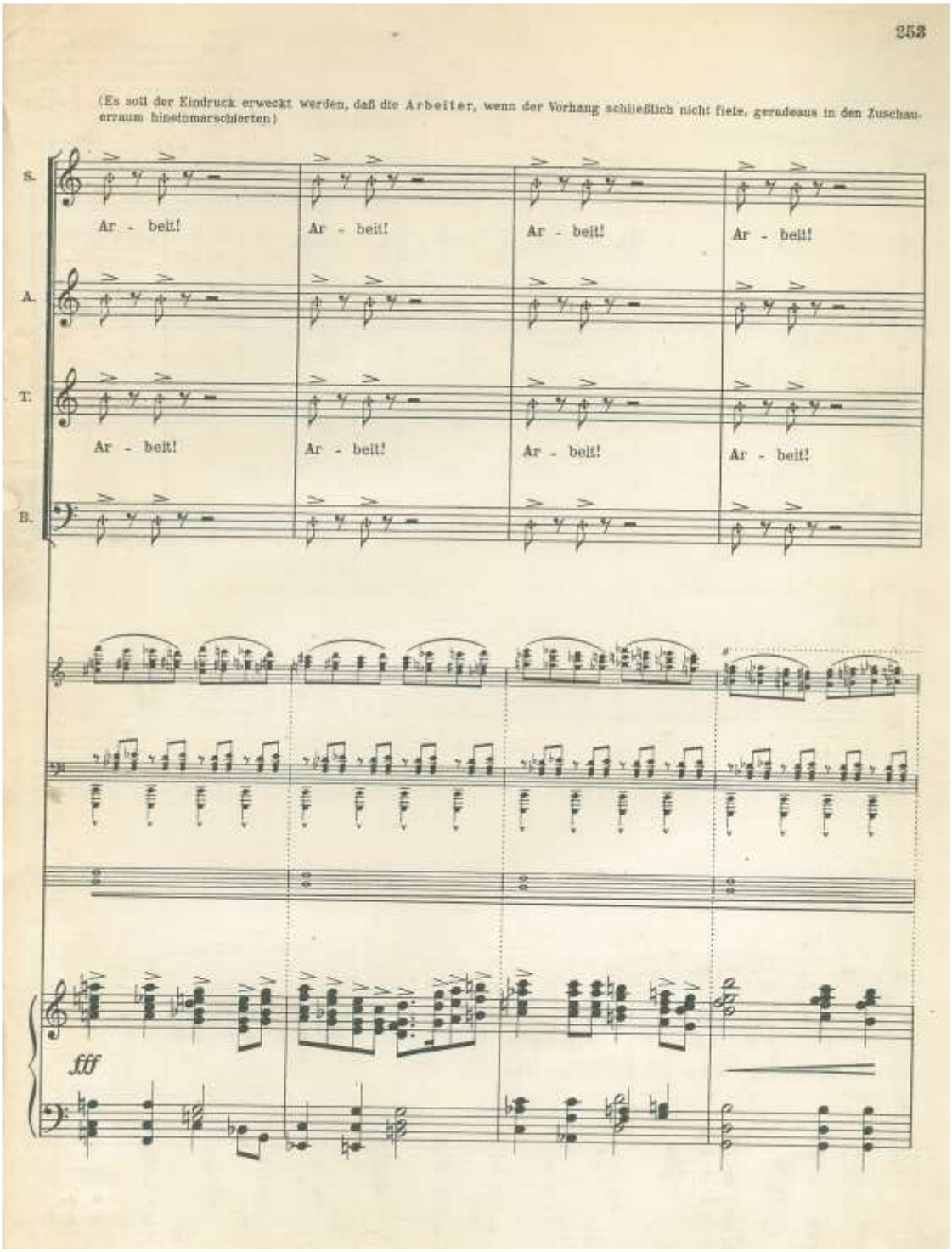
[25] Brand, *Maschinist Hopkins,* 230.
[26] Erica Schienberg, *Music and the Technological Imagination,* 106.

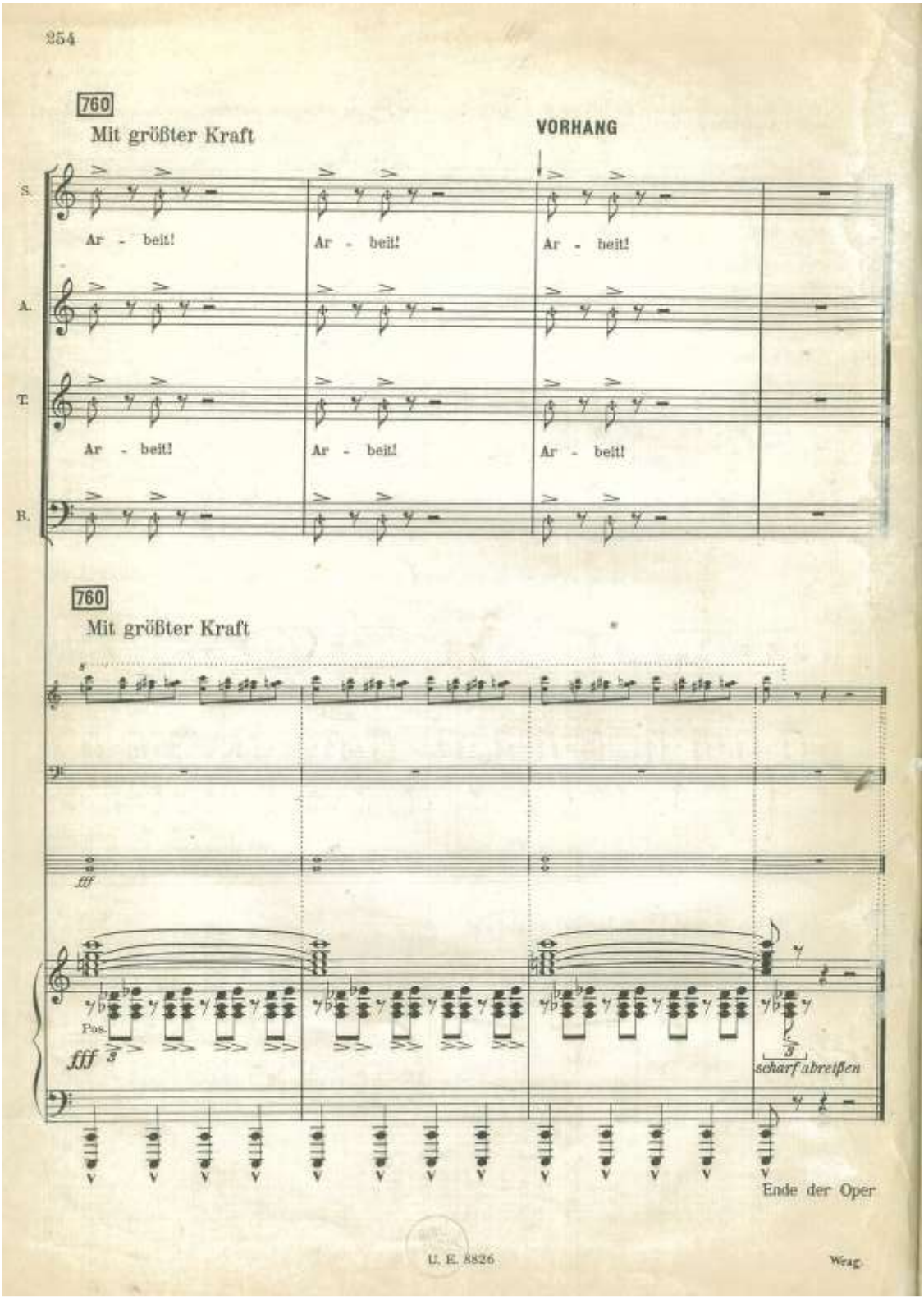
mass of workers, they are unaffected by the lives of those higher up, they are more interested in the machines, their true masters (as shown in Figure 8). The rhythmic repetition of the word 'Arbeit' in *Sprechstimme* at the end of the opera shows the hypnotic control in which the workers are under and the de-humanisation of the workforce. The melody has left the workers; all that remains is their lifeless service to the machines which dominate them.

In his review, Weber comments on the finale: 'One of the most beautiful moments, although the most difficult, is the unrealistic portrayal of the machine hall at night.'[27] He praises Brand's bold attempts in making the machines come alive, underlining the influence of Schoenberg on the musical development, admiring the mystical resurrection of the machines and praising the finale as the most powerful scene of the opera. It is almost as if the machines are fully unmasked in this scene, as in earlier scenes their true nature, although present, was hidden behind the crimes of man and the chorus of workers. The machines triumph at last, bursting through the operatic curtain, confronting the audience head on in a most spectacular fashion. This is somewhat allegoric to the journey of technology in wider Weimar operatic history. In *Jonny* (and other examples of Weimar *Zeitoper),* the radio was lurking in the background, a useful dramaturgical tool, yet in *Maschinist Hopkins* the machines have fought their way valiantly to the surface, eager for a more active role in the presentation of opera, demanding a genre of opera where they can produce, not simply reproduce, their own music, a purely mechanical stage. The finale of *Maschinist Hopkins* then, can be considered a prologue to the genre of mechanical, or media, opera.

[27] 'Zu dem schoenste, wenngleich Schwierigsten in der Ausfuehrung, gehoert die Irrealitaet der maschinehalle bei Nacht.' Weber, 'Urauffürrung in Duisburg, Max Brand: *Maschinist Hopkins*,' 224.

Figure 8: *Max Brand, Maschinist Hopkins (Zwölf Bildern) Op.11, (Piano and Vocal Score, 1928), 254.*





Before concluding the discussion of Brand's treatment of the machines, it is important to briefly note the connection of *Maschinist Hopkins* to the cyborg, as it is not possible to fully understand the personification of the machine in Brand's *Maschinist Hopkins* without recognising the phenomenon of the cyborg and its place within Weimar

culture, for example Raoul Housmann's sculpture *Mechanical Head* (1920), the photomontages of Hannah Hoch, and of course, Fritz Lang's *Metropolis* (1927).[28] Scheinberg compares the feminisation of the machine in this opera to Lang's Maria in *Metropolis,* claiming that both works exemplify the mechanical female dancer as a mass ornament.[29] She compares Nell to Maria, stating that the 'modern woman' and the machine were threatening to male domination.[30] Both *Metropolis* and *Maschinist Hopkins* explore the concept of 'man' and technology and contain expressionist imagery of humans being devoured by factory machines. Both appear to give the machine a life of their own, portraying them as fantasy creatures, with a dominant feminisation of the machine.

Metropolis has often been labelled as an expressionist film due to its expressionist interpretation of technology's oppressive role within modernity, reminiscent of the photomontages of Hannah Höch.[31] Furthermore, *Metropolis* was conceived during Lang's visit to America in 1924, displaying clear influences of Americanisms. What is more, the film used the cinematic technique of *Spiegeltechnik,* where a camera with two lenses focuses on two different objects.[32] *Metropolis* then, displays an entanglement of modernist techniques in its construction, which is also apparent in *Maschinist Hopkins,* where the machines are portrayed in a garish expressionist fashion, it contains jazz influences, and displays characteristics of *Zeitoper*. Thus emphasising that art during the Weimar Republic not only depicted a montage of subject matter, but also a montage of mediation techniques, especially in the representation of the machine.

David L. Pike notes that in *Metropolis,* Maria is often encountered in the crowd as a living threshold image:

> She is the first technological medium of communication between the world above, and to be sure, her body and its convulsions duplicate as an individual site, the threshold movement observed at work in the public space of the city. [33]

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[28] For more information on the development of the cyborg during the Weimar Republic, see: Matthew Biro, 'The New Man as a Cyborg: Figures of Technology in Weimar Visual Culture.' *New German Critique,* (Spring – Summer 1994): 71-110. JSTOR.
[29] Scheinberg, *Music and the Technological Imagination,* 112.
[30] Ibid., 109.
[31] Andreas Huyssen. 'The Vamp and the Machine: Technology and Sexuality in Fritz Lang's Metropolis.' *New German Critique*, no. 24/25 (1981): 221-37,67-68, JSTOR.
[32] Ibid, 68.
[33] David L. Pike, ''Kaliko – Welt' The *Großstädte* of Lang's *Metropolis* and Brecht's *Dreigroschenoper,' MLN,* vol. 119, no. 3, German Issue (April 2004): 474-505, 496, JSTOR.

If Maria is to be viewed as a medium of communication, a cyborg and a figure of leadership, comparable to Quelle at the end of *Maschinist Hopkins,* then this emphasises the power of the machines not just in terms of domination but in their use for communication and dissemination. This power is emphasised with the material qualities of the machine. In *Metropolis*, when the fake Maria is made, her harsh metal body is exposed before the transformation. Huyssen notes that even though the fake Maria was a feminisation of the machine, the machines in the film were completely under male control.[34] Yet in *Maschinist Hopkins,* the machines are in control from the very beginning. They start off as sentient, yet dormant, biding their time for triumph. They appear at first to be controlled by the men which work them, but at the end of the opera they devour their master, Bill, and their dominance is fully realised. Furthermore, at the height of their dominance, they sing with the voice of Nell, thus portraying a triumphant female machine in complete control, unlike the fake Maria, who was constructed and controlled by men.

Additionally, when the workers are devoured by the machines, Freder sees the machines as an altar, where bodies are sacrificed as if a pagan ritual. In this vision, the mechanics are invisible, cloaked with temple imagery and the costumes of the workers changes to fit the religious aesthetic. In *Maschinist Hopkins,* the machines portray a religious altar, but their material properties are enhanced, rather than masked, in order to show their true dominance. Furthermore, in *Metropolis,* the material properties of the machine are conveyed in the images, movements of the workers and the musical score. Yet in *Maschinist Hopkins,* it is the addition of the human voice which really emphasises the materiality of the machine. This underlines Weber's observation of *Maschinist Hopkins* as a sound film score, as it had the ability to not only manipulate the human voice, but have it as the heart of the machine in order to exaggerate their harsh dominance, which could not be achieved in silent film. It is important to note that the premier of the first 'talkie', *The Jazz Singer,* took place in New York in October 1927. Film companies continued to experiment with sound film and in Germany the founding of the Tobis syndicate on 30 August 1928, meant that 1929 was an important year for German sound film, with Walter Rutmann's *Melodie der welt* and Carmine Gallone's *Das Land Ohne Frauen*. Tobis adopted the Tri-Ergon system, which was originally dropped by UFA due to its technical failures in 1925 at the premiere of *Das Mädchen mit den*

[34] Huyssen, 'The Vamp and the Machine,',73.

Schwefelhölzern.[35] Brand began work on *Maschinist Hopkins* in 1927 and continued to work on the opera in 1928 and the work premiered in 1929. The composition of *Maschinist Hopkins* during these years of development of sound film technology is so clearly reflected in the suitability of the work to be produced as a sound film. Thus, *Maschinist Hopkins* indicated the potential of sound film in its entanglement of the human voice with other techniques of mediation, such as music, movement, lighting and scenery, highlighting intermedial links between opera and film during the Weimar Republic.

Arnheim put forward the idea that in order to create a radio drama which takes away the mechanical processes of quick scene changes, it should be recorded on film strips:

> It would be a step of great importance for the development of the art of radio drama, if every radio play which used space and montage as a means of expression were not 'performed' in the studio as if on the stage, but were recorded piecemeal on film strips, and the individual pieces cut properly afterwards and mounted on a sound film.[36]

This, according to Arnheim would eliminate improvised sound effects in place of careful montage. This is precisely what Walter Ruttmann achieved in his radio symphony, *Wochenende* (1930), of which he recorded a variety of noises on the sound track of an optical sound film, also known as *Tri-Ergon* process, thus creating a piece of cinematic radio. If one views *Maschinist Hopkins* as a sound film score, as Weber suggested, this adds another dimension to its media properties. The overlapping of sound film and radio techniques as theorised by Arnheim and implemented by Ruttmann, highlight not only the cinematic nature of *Maschinist Hopkins*, but its radio properties. Before the construction of a radio montage drama was fully achieved, exploration of sound film techniques had to be conducted. Brand's construction of sound, space, realisation of the machine and his implementation of the human voice, not only encompass sound film techniques, but also those of radio.

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[35] For more see Chapter 7 of Donald Crafton, *The Talkies: American Cinema's Transition to Sound 1926-1931,* (Berkley: University of California Press, 1997); Douglas Gomery, *The Coming of Sound: A History,* (New York: Routledge, 2005); Douglas Gomery. 'Tri-Ergon, Tobis-Klangfilm, and the Coming of Sound.' *Cinema Journal* 16, no. 1 (1976): 51-61. JSTOR.

[36] Arnheim, *Radio,* 126.

MASCHINIST HOPKINS AND THE 'INVISIBLE VOICE'

When examining the concept of the 'invisible voice' within Brand's *Maschinist Hopkins*, it could be suggested that Brand was manipulating the concept of the so called 'talking machine'. The term 'talking machine' dates back to the development of the phonograph during the 1890s. David Laing has discussed the power of the phonograph to be a talking machine or a musical instrument due to its recording and playback qualities.[37] Laing points out that this technology was branded as an early dictaphone, yet it was ineffective, it was only when the medium became effective for relaying music and light entertainment that it became successful, as well as showing its potential as a communicative medium.[38] With the visual loss of the performer, the transmitter, such as the gramophone or the radio speaker becomes the visual output of the disembodied voice, and thus become 'talking machines.' It is tempting then to connect this observation with Brand's machines as they appear to 'talk' and are shown as metaphysical extensions to the body, yet further analysis shows the oversimplification of this connection.

Theodor Adorno used the term 'talking machines' in his article *Nadelkurnen* (The Curves of the Needle) in 1928.[39] Adorno discusses the limited effect of these 'talking machines' and refers to them as private objects of a bourgeois culture, assisting the consumption of music, which the listener is unable to perform, stating that 'the diffuse and atmospheric comfort of the small but bright gramophone sound corresponds to the humming gas light and is not entirely foreign to the whistling of a tea kettle in bygone literature.'[40] Thus, Adorno concludes that the concept of 'mechanical music' is not appropriate to use when discussing these talking machines. To Adorno, these machines crudely regurgitate music and are an object of spectacle for a middle class audience. Yet Brand's impression of the 'talking machine' in *Maschinist Hopkins* appears to be contrast this. Brand's machines have a soul and voice of their own as opposed to Adorno's idea of technological ventriloquism, yet they are still mechanical in nature. The idea of the 'talking machine' in *Maschinist Hopkins* seeks to assert the dominance of the machine in modern society, by giving them a voice of their own rather than simply reproducing

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[37] David Laing, 'A Voice without Face: Popular Music and the Phonograph in the 1890s,' *Popular Music*, vol.10, no.1, The 1890s, (Jan 1991), 1-9, JSTOR.
[38] Ibid., 5.
[39] Theodor Adorno, 'Nadelkurven,' *Musikblätter des Anbruch*, 10, (February, 1928): 47-50. An English Translation of this article is available in: Richard Leppert eds. and trans., Essays on Music: Theodor W. Adorno, 271-275.
[40] Ibid., 47, Leppert's translation: 272.

existing material: the machines become producers rather than reproducers, unlike like the use of the radio in *Jonny*. Brand's machines have their own music; whereas Krenek's just imitate Max and Jonny's music.

The term *Unsichtbare Stimmen* defines the voices of the machines in the opening page of the score, making it clear that the voices of the machines should appear to emanate from them. The concept of the invisible voice was first discussed in the analysis of *Anbruch.* It was first noted in Warschauer's discussion of music on the radio in 1926, where he coins absolute music as invisible, music which gains most effect by pure auditory reception.[41] In radio however, it is not just the voice of the music which is invisible, but the audience, with an undefined space between artist and performer. In *Maschinist Hopkins,* the voices of the machine are invisible in order to personify the machine and to emphasise their mechanical nature. The audience cannot see the physical source of the voice and are given the impression that the machines are talking. This 'invisibility' distances them further from the audience, emphasising their mechanical nature, so the listener is able to concentrate on the music which they mediate, which in turn is a characteristic of radio music. Warschauer also drew upon the concept of the invisible when he discussed the notion of 'ether-wave-music' reference to the Theremin.[42] The invisible nature of the Theremin, a mechanical instrument, appeared to show a freedom from mechanical bondage. The invisible voices of the machines in *Maschinist Hopkins* on the other hand, seem to emphasise the exact opposite; the dominance of the machines.

Brand expressed his concerns on the problem of mechanical music and opera regarding human error and the mechanical stage.[43] The use of the invisible voice in *Maschinist Hopkins* solves this issue, as the music is being produced by real people. This also corresponds with Brand's call for opera to be brought up to date with modern technology, achieving a merging of opera and the machine. Brand accomplishes this with his compositional techniques, especially regarding the human voice. The use of the human 'invisible voice' for the machinery is a key step towards the intermedial connections of opera and new media technology, or in the case of Weimar Germany, radio opera. As Bekker stated, the human voice is integral to opera, its very nature and form, so using the human voice for the machinery as opposed to mechanical sounds seems the

[41] Frank Warschauer, 'Musik im Radio,' *Anbruch,* (1926/8-9), 374-379, 376.
[42] Frank Warschauer, 'Organisationsfragen der Technisierung,' *Anbruch,* (1929/4), 215-216, 215.
[43] Brand, 'Mechanische Musik uqnd das Problem der Oper,' *Anbruch,* (1926/ 8-9), 356-359

most natural way to merge these media in order to bring opera up to date.[44] Not only does the invisible voice personify the machines in *Maschinist Hopkins*, but it dehumanises the voices. The human voice is the heart of the machines in the same way that the human voice is the heart of opera.

The treatment of the invisible voice in this opera is also entangled with the treatment of jazz. The treatment of jazz in *Maschinist Hopkins* differs to that of *Jonny.* The jazz in *Jonny* is a cartoon of jazz music, grotesquely oversimplified; a gimmick. The jazz in *Maschinist Hopkins*, however, is according to Thompson, more idiomatic and characterises the scenic.[45] Brand uses Jazz to paint the picture of a New York night club, in order to create dramatic realism. During this scene, Nell signs her showbiz contract and Bill celebrates buying his shares. It is the height of success for the couple, yet it is short lived, only temporary. Three black men sing George Anthiel's *Black Bottom* text, acting as the entertainment in the dance club. After the contract is signed two glamourous, modern, dancers are instructed to enter from opposite sides of the stage and dance an epic tango in celebration (As seen in Figure 9).[46] This entrance epitomises the opera's suitability for a sound film, and the sense of epic Tango, underpinned by the orchestra, highlights the cinematic ambition of this piece. After the dancers enter there is a baritone duet underpinned by a jazz ensemble (including a banjo and saxophone) which is instructed to be 'in the background, invisible, as from afar'.[47] It is not indicated whether this represents live music from a distance, or even a gramophone/radio broadcast. In this scene Brand explores the idea of the invisible performer, distant sounds, and background music. It is almost as if the music has gone from diegetic (the black singers) to non-diegetic as it would do on the cinema screen, emphasising once more the intermedial flows between modern media and opera during the Weimar Republic.

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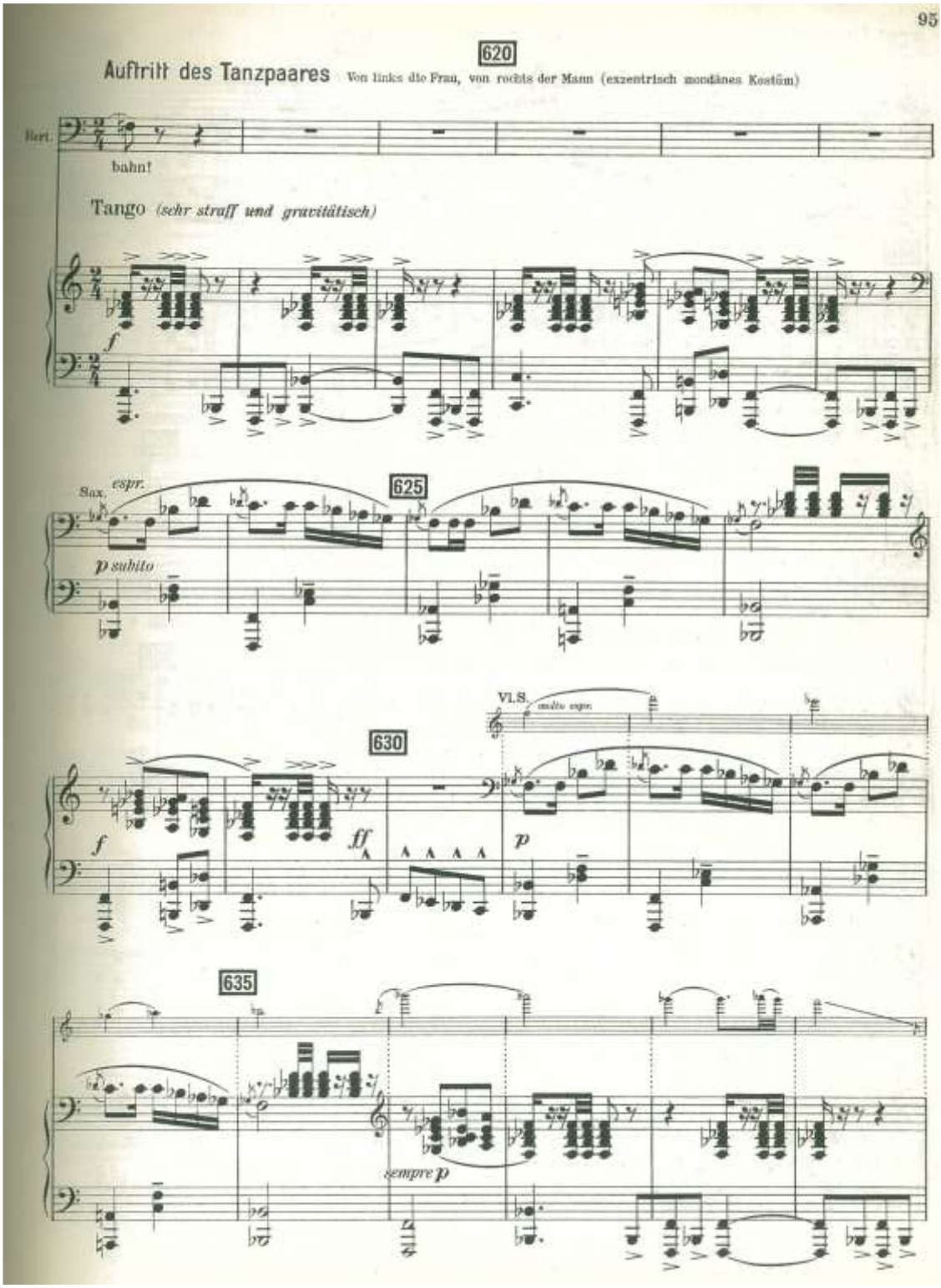
[44] See; Paul Bekker, *The Changing Opera*, Translated by Aurthur Mendel (London 1936), 259, Original published in America 1935).
[45] Oscar Thompson, 'New operas at Duisburg,' *The Musical Times*, vol.70, no.1038, (Aug 1, 1929): 715-717, 715, JSTOR.
[46] Brand, *Maschinist Hopkins*, 95.
[47] 'Im Hinterground, unsichtbar, wie von Ferne,', Ibid., 96.

Figure 9: *Max Brand, Maschinist Hopkins (Zwölf Bildern) Op.11, (Piano and Vocal Score, 1928), 99.*



CONCLUSION

This chapter has explored the performance techniques in Max Brand's factory opera, *Maschinist Hopkins*, drawing particular attention to the treatment of the machines and of Brand's implementation of the 'invisible voice'. Additionally, Brand's treatment of the machines is an attempt to solve the problem of mechanical opera, which he discussed in his earlier article on mechanical music and the problem of opera, as the machines are human voices, rather than 'mechanical', allowing for human error within the so-called 'stage processes'. Even though this work does not explicitly incorporate radio, it adopts techniques required for radio opera, and the work thus provides an insight into how new media technology including film and radio. This work pushes the boundaries of operatic performance by employing media techniques, such as the concept of the 'invisible voice' of the machine and ingenious realisation of cinematic space in the jazz scene. The timing of Brand's composition of *Maschinist Hopkins* is also significant the work developed alongside the expansion of sound film technology and was premiered in 1929 which was a significant year for the development of sound film in Germany. Thus *Maschinist Hopkins* displays intermedial relationships in its suitability for sound film adaptation. Furthermore, the opera mirrors the development of the adaptation of technology in Weimar opera, creating a turning point in opera's realisation of the machine. Machines are no longer mere props as they were in *Jonny,* but appear ready to be at the forefront of the performance; they are integrated into the operatic performance and narrative, rather than serving as dramaturgical solutions. Both the visual and audio representation of the machine in this work will also act as a comparison to Goehr's treatment pure audio depiction of the machine. *Maschinist Hopkins* serves as an example of an operatic staging of a factory setting and will assist in understanding Goehr's techniques for audio imagery. It has been clear throughout this thesis that German musicologists engaged in debates on the new medium and that the operas discussed reflect their changing attitudes. The following chapter therefore, will show the final stage in development of Weimar opera, and it will illustrate what Brand's realisation of the 'invisible voice': the potential of the radio to produce opera.

Chapter 5

Walter Goehr's *Malpopita*: Opera for Radio

> IN the beginning was the voice.
>
> Voice is sounding breath, the audible sign of life. It mirrors the greatest difference between human beings: the sex difference. It mirrors difference in age. It mirrors individual difference in members of the same sex; in a word it mirrors personality. It is the singing voice by which man projects himself into the sphere of sound, by which he changes his visible corporealness into invisible sound.
>
> **Paul Bekker (1935)**[1]

In *The Changing Opera*, which was first published in 1935. Bekker identifies man as a speaking, moving and singing being, with the sustained media of language, voice and body.[2] He describes the development of the human voice and presents his understanding on how it has taken shape throughout history. He states that 'the singing voice is the root from which the opera has sprouted and grown'.[3] Opera originates from the voice. Consequently, 'the opera is the realization of the potentialities of the singing voice, whose laws it brings to its fulfilment'.[4] The significance of the human voice has already been observed in the previous chapters. If the human voice is as Bekker believes, a direct expression of humankind and a revelation of its spirit, an opera constructed wholly of sound emphasises these characteristics, as it cannot rely on visual effects. Radio opera, meaning opera which has been specifically composed for radio performance, relies heavily on the consciousness of the significance of the human voice, and not just the singing voice. This is apparent in Walter Goehr's radio opera *Malpopita* (1931), which up until now, has been neglected in musicology and radio history. This chapter will discuss how the opera was specifically written for radio, giving a detailed musical analysis in order to highlight Goehr's use of radio as a compositional tool. The chapter will then place the work within the context of opera during the late Weimar Republic. It will then show how Goehr could have been influenced by technical advice given in Weimar musicology, with particular reference to Warscahaur's 1929 *Anbruch* column, *Musik und Technik*. Goehr's concentration on and manipulation of the human voice in this opera show his

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[1] Paul Bekker, *The Changing Opera*, translated by Aurthur Mendel, (London: J.M. Dent & sons, ltd., 1936), (Original published in America, 1935), 17
[2] Ibid., 17-18.
[3] Ibid., 27.
[4] Ibid.

understanding of the potential of radio and its ability to create imagery in the absence of the visual effects of the stage. Bekker's assertion that the history of opera becomes the history of the voice suggests that *Malpopita* is a significant artefact as well as being a brilliant example of experimental radio.

Even though Gilfillan does not discuss *Malpopita* in his analysis of experimental radio, he recognises Walter Goehr's work in German experimental radio. In 1928 Goehr composed the music for Friedrich Wolf's *S.O.S…rao, rao…Foyn,* a *Hörspiel* portraying the re-enactment of the Italian airship's expedition to the North Pole in 1928. Gilfillan argues that this play shows the power of the solitary radio operator, depicting the changing perceptions of radio in Weimar Germany; radio's shift from an experimental medium into entertainment culture.[5] This play also depicts the radio as part of the rescue mission and its power to communicate messages on a large scale, as well as clear left-wing political overtones. These are themes which Goehr clearly transferred to *Malpopita*. In fact Gilfillan's introductory words demand a detailed analysis of this work, even though he does not reference it, as this description fits the opera significantly:

> Yet there exists outside this history equally compelling traces of the experimental, which move beyond the textural limitations of the radio play genre to explore the possibilities of a radio-centred art form based in notions of interactivity, intertextual play and intermedial convergence, and the creation of networked communicative spaces for artistic collaboration.[6]

Before one can discuss how *Malpopita* fits this description of radio-centred art other composers who experimented with radio during the Weimar Republic must also be observed. This will provide context for this opera and establish its place within radio history narrative.

MUSIC AND EXPERIMENTAL RADIO

Malpopita is by no means an isolated example of a musical experimentation within Weimar radio. In 1929, Brecht, Weil and Hindemith collaborated for the Baden-Baden festival to create a radio cantata, *Der Lindburghflug* (the flight across the ocean), which was based on Charles Lindburgh's transatlantic flight from New York to Paris in 1929. The piece was staged as a radio broadcast, followed by a traditional performance in a concert setting. For the radio broadcast, the stage was split into two halves; one half

[5] Ibid., 82.
[6] Ibid., XIV-XV.

represented the 'inside' of the radio with the performers and an announcer, and the other half showed the listener in his living room filling in Lindbergh's part. Rehding draws attention to this piece in his chapter on Weimar opera and radio, where he indicates that the radio was not a prop, but a reconstruction of its medial function.[7] He also notes that this experiment relied on so-called 'active' listening by filling in some vocal lines at home to sheet music. This, according to Rehding, was why audiences preferred the concert version.[8] Erica Scheinberg has also written on this piece. In her thesis, she dedicates a chapter to *Der Lindberghflug*, describing the radio as an experimental tool for composers.[9] Technology then was not just a medium for projecting music, but a tool in its creation. Scheinberg presents a detailed analysis of the work's composition, performance and its place in the context of media history. She underlines the step from public to private listening, drawing on Hans-Bredow and his philosophy of radio shaping the German culture.[10]

The Baden-Baden festival of 1929 (where *Der Lindburghflug* was performed) dedicated two days to music for and broadcast by film and radio.[11] Oscar Thompson reported on the festival in the British publication, *The Musical Times:*

> For there was no instance of lazy listeners turning the dials of receiving apparatus in their own homes or hotels, but of enterprising concert patrons, each equipped with the necessary admittance ticket, going by cab or on foot to the Kurhaus and taking assigned places in one or another of the several rooms given over to the radio programmes of the festival. Whether in the Damen Salon or the Speisesaal, they were seated about tables in a manner to suggest quite another hunger than that for music: but knifeless, forkless, spoonless, the perfect picture of a Barmecide feast.[12]

This description of the audience as 'concert patrons' implies that the composers involved in this festival wanted to address a concern or perception of a passive audience. The reference to the Barmecide feast emphasised the imaginary world of the airwaves and the

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[7] Alexander Rehding, 'Magic Boxes and Volksempänger: Music on the Radio in Weimar Germany,' in Nikolaus Bach ed., *Music, Politics and Theatre in Germany: 1848 to the Third Reich,* (Ashgate; Aldershot 2006), 255-272, 270.
[8] Ibid.
[9] See: Erica Scheinberg, 'Chapter 4: Kurt Weill's Radio Style 'Listening in' to *Der Lindberghflug*,' *Music and the Technological Imagination in the Weimar Republic: Media, Machines and the New Objectivity.* (PhD Thesis submitted at the University of California, 2007), 98-130.
[10] Ibid., 147-148.
[11] Oscar Thompson, 'The Baden-Baden Festival: Music for Wireless and Films,' *The Musical Times,* vol. 70, no. 1039, (September 1. 1929): 799-802, 799, JSTOR.
[12] Ibid.

illusionary qualities of the radio.[13] Thompson highlights how the music was written specifically for broadcasting in mind, which included adapting to the advantages and limitations of the medium.[14] The review is extremely critical in nature, commenting onchildish aspects of the piece and Weil's 'cartoon' jazz music. What is more, Frank Warschauer noted that even though the work was one of the strongest of the festival, it did not count for the 'inhibitions of intelligibility' of the radio, where the words under the music came across unclear.[15] This shows the experimental nature of the work and that composers were still adapting their compositional techniques for the radio, and the Baden-Baden festival was an outlet for this experimentation.

Another experimental radio piece was composed in 1930 by Walter Ruttmann, a practitioner in experimental film and sound, who composed *Wochenende* (1930), a radio symphony consisting of a montage of real sounds depicting a weekend in Berlin. The piece begins with factory sounds to depict the end of a working week. Then the listener is exposed to traffic sounds, as if to indicate a journey. Voices, bells, cars, trains, sirens and whistles are cut and pasted together, to create a busy street collage. In the middle of the piece, cheerful whistling, singing, children playing, church bells, marching bands and nature sounds can be heard, indicating the leisure activities of family life and the joy of which nature has to offer. There is a considerable difference between the working and leisure sounds, as if to glorify the weekend as a utopian way of life, away from the modern factories and capitalist demands. The piece ends in rather a pessimistic fashion however, with the return to work on Monday morning, returning to traffic sounds, sighing, machines, and typewriting. The sounds become mechanical and monotonous once more ready to begin the cycle again.

Moving away from Germany to Britain, Margaret Fishers research on Ezra Pound's radio operas is significant to this chapter.[16] Fisher focuses on the two poetic operas which Pound composed for radio in the early 1930s. In her discussion she draws attention to German radio and Arnheim's theory of the microphone technique. She notes that the Weimar Republic 'voiced high expectations' for radio and 'radio would prove to

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[13] The term 'Barmecide' originates from *Arabian Knights,* where there is a tale of a rich man serving a feast of empty dishes to a beggar. Therefore a Barmecide feast is something that promises a great deal but delivers nothing, like an illusion.
[14] Thompson, 'The Baden-Baden Festival: Music for Wireless and Films,' 800.
[15] 'Hemmungen der Verständlichkeit,' Frank Warschauer, 'Musik und Technik in Baden-Baden,' *Anbruch,* (1929/7-8): 306-308, 308.
[16] Margaret Fisher, *Ezra Pound's Radio Operas: The BBC Experiment, 1931-1933,* (Cambridge, Mass: MIT Press 2002).

be a pedagogical and progressive tool' in educating the masses.[17] Fisher argues that German radio cancelled out the critical response of its audience as the listener becomes part of a group.[18] She also notes Arnheim's wish for a new intimacy in radio, a broadcasting system which addresses the individual rather than the collective. Fisher refers to Arnheim and his contemporaries (including other radio theorists such as Brecht, Harding and Pound himself) when analysing Pounds radio operas, as well as drawing upon literary theories. Fisher's book serves as an interdisciplinary study which acknowledges the radio as a producer of both poetry and opera, in an experimental and futuristic capacity.

Pound's radio opera *Testament of Francios Villon* (written in 1919, first performed in Paris 1926 and broadcast in Britain in 1931), is based on a 15th century collection of poems. The music of this opera certainly reflects the medieval flavour of the words. The instrumentation often underpins the vocal line, where the language of the music is present in the rhythmical flow and modal melodies. The orchestration is thin and words are modulated by the rise and fall of the voice. The language of the libretto is French, yet Pound inserted spoken dialogue in colloquial English. According to Fisher, this reflected Pound's use of language as melodrama, where dramatic tension was provided by rhythmic cadence rather than narrative, where the 15th Century voice cuts through the modern voice.[19] Pound's ingenious writing for the voice emphasises his knowledge of the medium of radio and his experimentation with poetic drama. This chapter will compliment Fisher's research, by presenting a complete analysis of Germany's first radio opera, Goehr's *Malpopita,* as well as reflecting on theoretical viewpoints within Weimar musicology, and thus highlighting the relationship between theory and practice.

INTRODUCTION TO *MALPOPITA*

Peter Jelavich has referred to Walter Goehr's *Malpopita* (libretto by Mendelssohn and Seitz) as the first opera conceived specifically for radio.[20] Yet radio was not the only medium which Goehr experimented with. His deep understanding of the avant-garde led him to compose music for the gramophone, film and radio. During the 1920s, Goehr undertook lessons in composition from Ernst Krenek and Arnold Schoenberg at the Berlin academy of arts. Until 1932 he worked at the Berlin broadcasting service, where he was

[17] Ibid., 62.
[18] Ibid., 54.
[19] Ibid., 90.
[20] Peter Jelavich, *Berlin Alexanderplatz: Radio, Film and the Death of Weimar Culture,* (Berkeley: University of California Press, 2006), 111.

involved in a wide range of musical-performance projects. This included collaborating with Kurt Weill and authors such as Alfred Döblin. Goehr therefore, was certainly equipped with knowledge of the new medium, which enabled him to write music for an opera which was performed on the radio rather than the traditional operatic stage. During the mid-30s, Goehr moved to Britain to work with the Gramophone Company, where he lived out the rest of his life working and composing for the Gramophone Company, London Philharmonic Orchestra and the BBC.[21]

The premiere of *Malpopita* was conducted by Erich Kleiber and it was transmitted from Berlin on 29 April 1931 and lasted 75 minutes. The story of *Malpopita* centres on the protagonist Adam and his journey to the tropical island of Malpopita. At the beginning of the opera, Adam is working for an oil factory, grafting long hours for minimal pay. He decides he has had enough of this meaningless lifestyle and asks for his papers with the vision of leaving for Malpopita. On his journey, Adam boards a ship and consequently falls in love with the captain's daughter, Evelyne. When it is revealed that the ship belongs to smugglers, it is chased by the authorities and the characters end up ship wrecked on a tropical island, which miraculously turns out to be Malpopita (or at least that is what the crew call the island). For a while Adam's dream seems to be fulfilled. He is on a beautiful island with his love Evelyne and all of the coconuts he could ever wish for, yet when distant voices sing that they have found oil on the tropical island, the crew are excited and despite Adam's warnings, form the 'Malpopita Oil Company'. The opera ends as it began, Adam's name is called out by the factory foreman and he is paid a pitiful ten marks fifty, his dream island has been infiltrated by the capitalism from which he wished to escape. A more detailed synopsis of *Malpopita* can be found in the Appendix.

All that survives of this opera is a piano-vocal score.[22] When the *Komische Oper Berlin* staged the work (2004), they commissioned Andrew Hannon, with the help of composer Alexander Goehr (Walter Goehr's son), to orchestrate the piano score for a small orchestra.[23] The piano-vocal score provides the orchestrator with some clues as to which instruments were intended to be heard over the ether. For example a bassoon,

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[21] For more information on Goehr's life in Britain see: Lydia Goehr, 'Music and Musicians in Exile: The Romantic Legacy of the double Life,' in Reinhold Brinkmann & Christoph Wolff ed., *Driven into Paradise: The Musical Migration from Nazi Germany to the United States,* (Berkeley: University of California Press: 1999), 66-91.

[22] Walter Goehr, libretto by Mendelssohn and Seitz, *Malpopita: kleine Funkoper,* (Piano and Vocal Score, 1931).

[23] Andrew Hannan is a British composer based in Berlin. He worked under the supervision of Alexander Goehr (son of Walter Goehr) in order to produce a realistic impression of the original score.

mandolin and saxophone are mentioned occasionally in the score. Also percussion is often indicated, both by name and by notation (for example cross headed notes). As the opera was performed on stage during the 2004 reproduction, rather than transmitted, producer Heidi Mottl, had the challenge of stage design. She decided to stage the work in a long factory building and interpreted Adam's experience as a dream.

A CD recording of the revival was released also released.[24] The final track of the CD of this reproduction consists of a radio feature with Mottl, Hannon, and Alexander Goehr. Hannon discusses his difficulties in orchestrating the work, where Mottl explains her staging choices.[25] Alexander Goehr presents an outline of the piece, explaining its place within the Weimar Republic. The introduction in the CD booklet is written by Walter Goehr's granddaughter and musicologist, Lydia Goehr. Goehr introduces her Grandfather's interest in the media of the Weimar Republic, and his involvement with radio projects. She also highlights the lack of contemporary sources which discuss the music of the opera, but instead they concentrated on the political content of the libretto. The lack of primary and secondary analysis of this work means that its examination is essential in order to place it within the context of the Weimar operatic climate and experimental radio. This chapter will now present a thorough examination of the music of *Malpopita*, showing how the music was written specifically for radio.

THE MUSIC OF *MALPOPITA*

The music of *Malpopita*, like the music in Krenek's *Jonny*, can arguably be described as a montage of German music history and modernism. The work draws upon many compositional styles from historical and contemporary composers. There are many references to folk songs, sea shanties, jazz, mechanical music, chorales and romanticism. What is remarkable about the composition however, is Goehr's ability in adapting the human voice. This is what makes the piece particularly suitable for radio performance, as throughout the opera Goehr uses the voices to create a distinct sound world, rather than relying on instruments or objects. This section will now explore the composition of *Malpopita,* placing emphasis on the techniques which Goehr used in order to adapt opera from a visual and auditory medium, to a pure acoustic piece of art.

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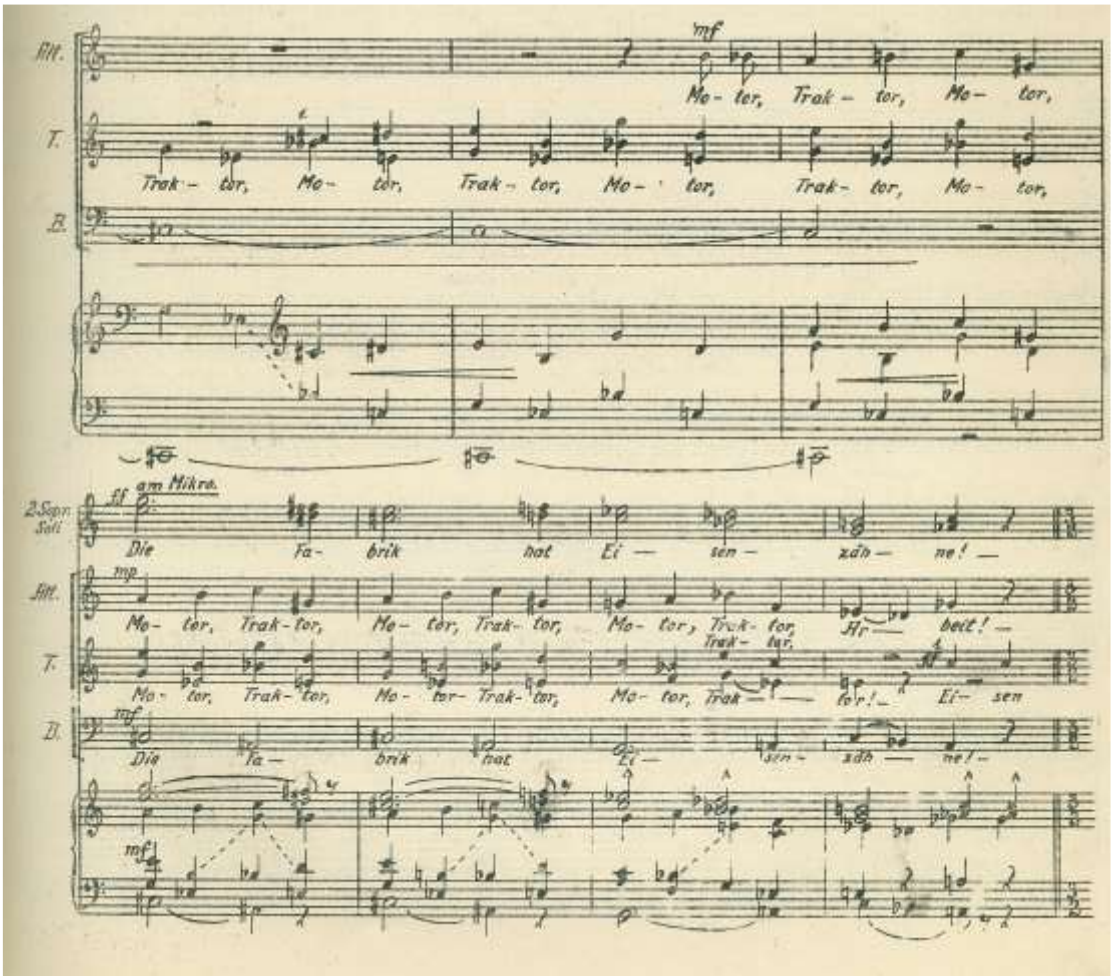
[24] Goehr, *Malpopita*, Performed by *Komische Oper Berlin*, Capriccio, C60124, November 2005, CD.
[25] The 2004 revival was set in a factory warehouse, where images of a tropical island were projected onto the factory walls.

The opening number, entitled *Arbeits Chor*, or *Work Chorus*, provides the first example of Goehr's ingenious voice writing. The scene attempts to depict a busy, yet monotonous factory environment. This is where the protagonist, Adam, works. Instead of using numerous percussion instruments to resemble to machinery, Goehr uses words and notes in the voices. The voices sing 'Motor, Tractor' continually in repeating patterns.[26] They sing in a fugue like round, with notes moving in a circular fashion, and each voice repeating its same four notes (as be seen in figure 10). This creates the image of turning cogs and the continuation of motion.

Figure 10: *Goehr, Mendelssohn and Seitz, Malpopita: Kleine Funkoper, (Piano and Vocal Score: 1930), 3.*

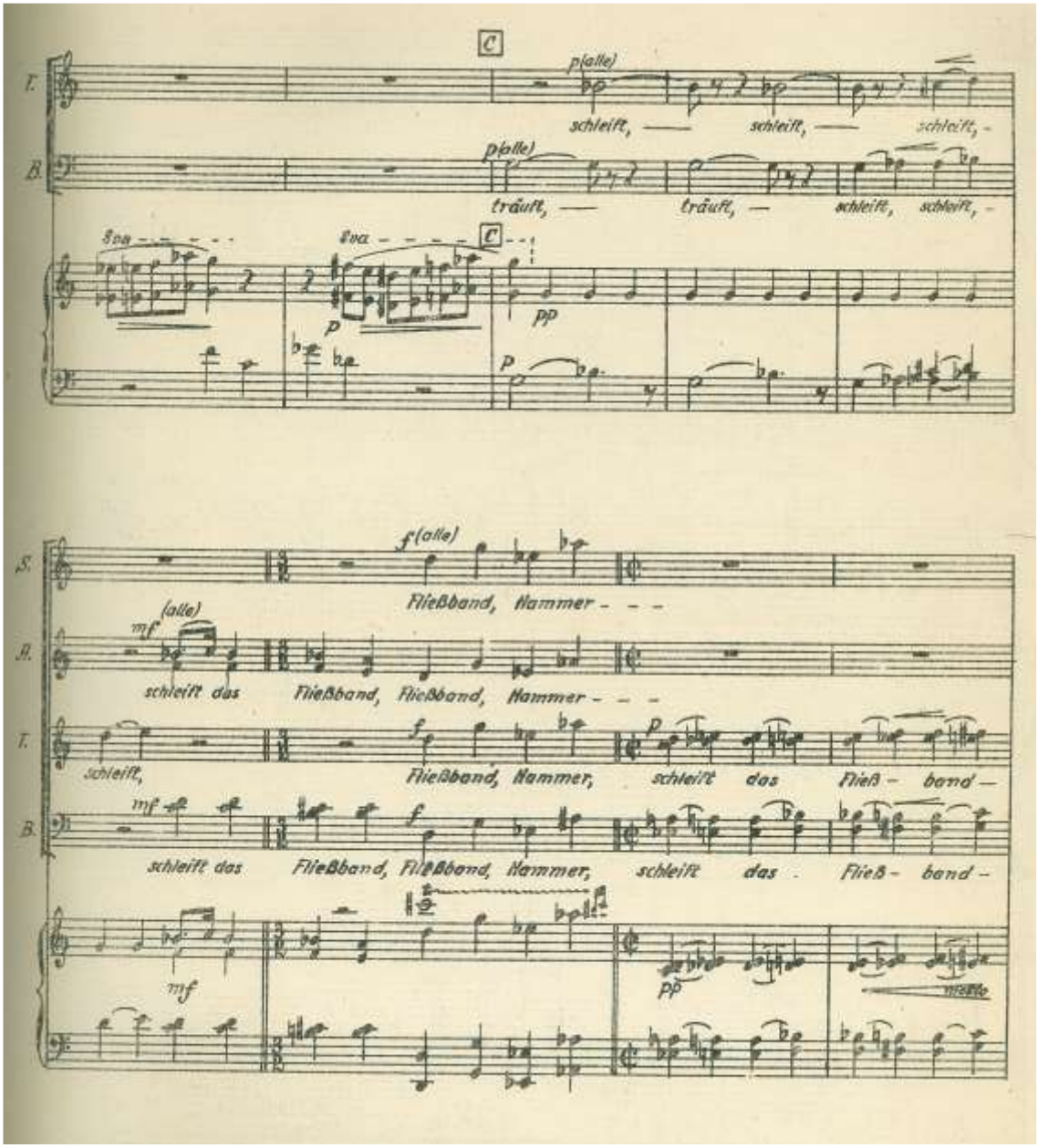


[26] 'Motor, Traktor,' Goehr, *Malpopita*, 3.

The sopranos sing ‘The factory has teeth of iron’, with the understanding to sing at the microphone (see figure 10).[27] This implies that the factory sounds of ‘Motor, Tractor’ are to be sung further away from the microphone, in order to simulate the factory in the background, and illustrating the iron teeth which the sopranos are describing. It is also noteworthy that it is the soprano voices which Goehr wanted in the foreground. As discussed previously, scholarship regarding early sound recording showed that critics claimed that words were most suited to radio, yet the female voice had a tendency to sound shrill when electronically reproduced. Yet this shrillness is appropriate here as it assists in depicting the horror of the factory, alluding to techniques from expressionist opera. Goehr displays his knowledge of radio clearly in this opening number as his composition plays to the strengths and weaknesses of the new medium, in order to create a moving picture of a factory scene through pure auditory construction. This is emphasised later on when the voices once again mimic factory sounds. The chorus of workers sing: ‘Dripping, grinding, dripping, grinding, grinding the conveyor belt. Strike, hammer…strike hammer, saw, crank, bolt and racket.’ In order to depict the motion of the conveyer belt, the voices sing a meandering semitone motif.[28] This is punctuated by accenting the words ‘Hammer’ and ‘Strike’ (as shown in figure 11). The accents on these words emphasise the nature of the tools and add to the precise, rhythmic and mechanical nature of the scene, mimicking the work noises commonly found in a factory environment.

[27] ‘Die Fabrik hat Eisen Zähne,’ Ibid.
[28] Ibid.

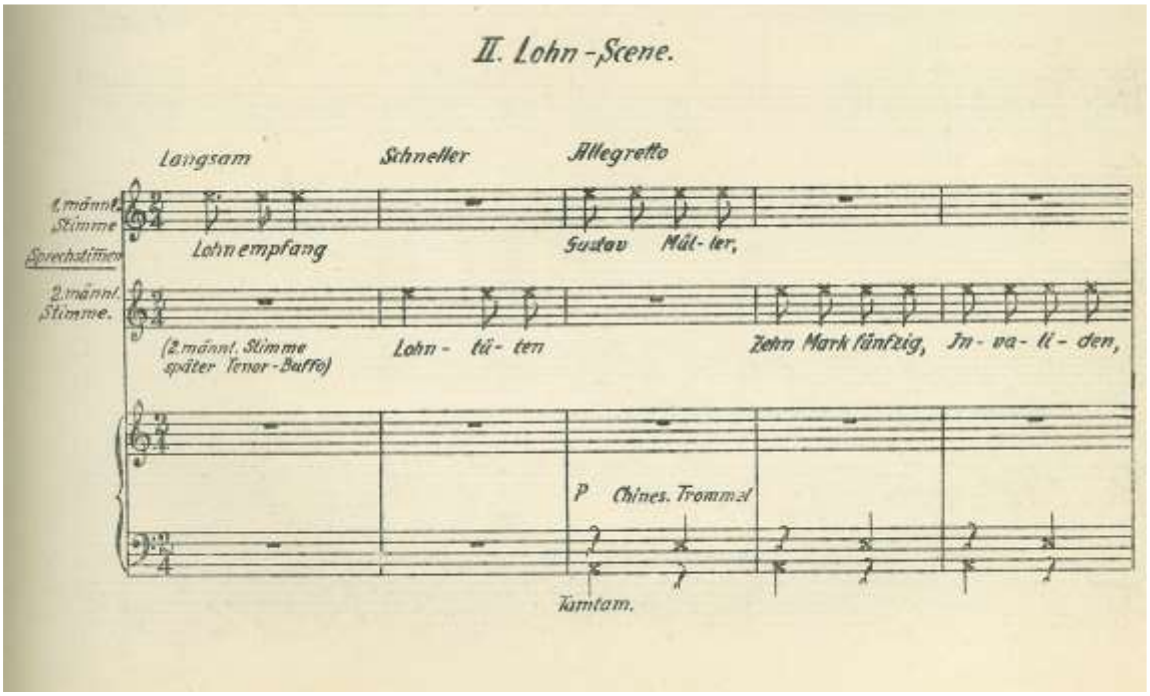
Figure 11: *Goehr, Mendelssohn and Seitz, Malpopita: Kleine Funkoper, (Piano and Vocal Score: 1930), 5.*



The second scene, *Wages Scene*, is in line with the aesthetic which Goehr initiates in the *Work Chorus*. It begins with factory foremen announcing the workers' wages and deductions. Here the vocal line portrays the technique of *Sprechstimme,* a method often associated with the Schoenberg School, where the notes are delivered in an aesthetic halfway between speech and song. The notation of the voices (as shown in figure 12) uses crosses in the note space E as opposed to the traditional round head. Goehr's decision to use *Sprechstimme* here, rather than just spoken words over the music is to keep the rhythmic integrity of the March aesthetic employed during this section, enabling the

singers to deliver their lines clearly. Another point of interest is that Goehr splits the part between 2 voices. This creates a somewhat antiphonal texture, adding depth to the audio, which in turn adds to the construction of the imagery for the listener. While the foremen give out the wage packets, they are accompanied on the first and third beat by a tam-tam and a Chinese drum. This creates a military aesthetic, capturing the totalitarian nature of the factory, and casting a dark shadow on the previous *Work Chorus*. The image Goehr creates with the music here is that of a factory prison, a hopeless totalitarian environment where workers dream of the tropical island of *Malpotia* as their Utopia and a symbol of freedom.

Figure 12: *Goehr, Mendelssohn and Seitz, Malpopita: Kleine Funkoper, (Piano and Vocal Score: 1930), 13.*



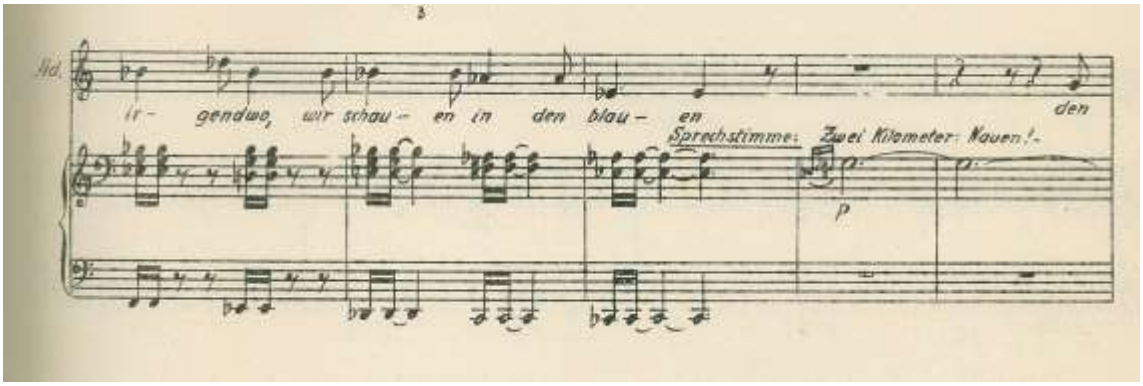
Sprechstimme is used by the foremen throughout the scene. The singing voices revert back to the techniques used in the previous scene, where they mimic the machinery. This time, however they sing: 'And tomorrow more work, work, work! Ten years, twenty, fifty! Forever and ever and ever!'[29] The notes on the page ascend and descend in a circular pattern, similar to 'Motor, Tractor' in the previous scene. When the foremen call 'Adam Schickedanz', there is a slight pause. Adam emerges and, deciding he has had enough of

[29] 'Und morgen wieder Arbiet, Arbeit, Arbeit! Zehn Jahre, Zwanzig, Fünfzig! Bis in alle Ewigkeiten!' *Malpopita,* 20-21.

factory life, asks for his papers. To symbolise his escape from the oppressive factory environment, a gong sounds to halt the workers and gives a hint of daylight before the next scene.

As soon as Adam leaves the factory, the music's aesthetic instantly changes. There is more tonality within the harmony and in the *Wandering Song* there is finally a snippet of a catchy tune. In this scene Adam is travelling across Germany, so the environment created by the instruments and voices now have to replicate the outside world rather than the inside of a factory. The opening tremolo pianissimo chords rise to create ambiguity in tonality, and an unsure optimism, and conjure the allusion of beams of sunlight and a gentle breeze. This light, quiet accompaniment is a contrast to the heavy music from the factory, providing a clear contrast for both settings, which cannot be achieved visually through the medium of radio. The vocal line is broken up into small, simple phrases, and is punctuated by crisp, high cadences. The quick, bouncy melody expresses Adam's excitement about leaving the factory and stepping out into the open air. He sings of all the nature he sees on his travels, bringing to mind a picture of a small child skipping through a field. Furthermore, this song also uses human voices to replace the visual aids of the stage. In order to convey road signs, spoken voices narrate them. At these points, the accompaniment changes to a soft pedal G, ornamented with a short chromatic scale (see figure 13). The spoken voices and change in accompaniment draw the listener's attention, and creates a somewhat ghostly aesthetic, as the voices are not present in the drama, they are 'invisible', but are there to act as eyes for the listener.

Figure 13: *Goehr, Mendelssohn and Seitz, Malpopita: Kleine Funkoper, (Piano and Vocal Score: 1930), 23.*



At the end of his journey, Adam reaches the Tavern of Jonny Dreckmann in Hamburg on the Elbe. The tavern setting is established by the chorus, who sing a drunken sea shanty, initially at the forefront of the scene, but gradually fading into the background as the scene develops, as instructed by Goehr in the score.[30] This shanty is in a moderate 3/4 time, with a homophonic texture. The rhythmic notation is also essential to the scene. The dotted rhythms and triplets add the drunken feel of the melody, by mimicking a swaying effect, assisting the imagery of a pub scene, especially as it fades out underneath the speaking voices. In the tavern Adam meets Piet Hein, with whom he boards a ship that is setting sail for Malpopita. The departure scene is mainly a spoken one, with short snippets of music to punctuate the phrases, reminiscent of traditional operatic recitative. On the ship's departure a whistle is indicated in the score to make it clear to the audience that the ship is departing for the sea.[31] Adam is quickly identified as someone who is unfamiliar with seafaring. This is emphasised by Richard (the steersman) and his reluctance to let him on board. His introduction to the hostile steersman seems to add to his 'otherness' and his naivety towards what he is about to embark upon.

As the ship starts its journey, the crew sing the *Malpopita Lied*. This begins unaccompanied, is chordal in nature, and reminiscent of early sacred music. The chorus sings of the grey coast of Europe, bidding farewell as they sail away. The music's allusion to the Gregorian chant and chorale reflects the crew's nostalgia towards the tropical island. The lack of instrumental accompaniment makes the voices sound clearer, especially in the context of early radio technology. This number slowly builds layers of harmony and counterpoint as the crew immerses itself deeper and deeper into a daydream of the island as they travel across the ocean. The melody is chromatic in nature and the first verse uses all twelve notes of the chromatic scale. It could be argued that Goehr, like Krenek, associates twelve tone music with nature or a utopian ideology for future of composition. Yet the melody moves closely around the chromatic scale, as opposed to ambitious Schoenbergian intervals which were present in other works of musical modernism from the Republic (including *Als ich damals* from Krenek's *Jonny*). Additionally, the strict 4/4 feel of this lied does not fit with the freedom of twelve tone style. The legato feel to the melody creates a contrast to the mechanical sounds of the factory. As the layers of the music gradually build, the listener is slowly hypnotised by the music and they too become

[30] Goehr, *Malpopita*, 31.
[31] Ibid., 33.

temporary victims of the temptress Malpopita. The use of romanticism at this point in the opera highlights the fantasy of Malpopita, as opposed to the reality of everyday factory life. The listener imagines themselves on the boat with the crew, bobbing along, and dreaming of a better life on the tropical island.

This scene is where Adam first meets the captain's daughter, Evelyne. He hears her singing the melody of the *Malpopita Lied* and he becomes entranced by her, and for the first time is distracted from his goal. Evelyne is instructed to sing away from the microphone, implying that Adam can hear her in the distance; she is 'off stage'.[32] This is a similar technique to scene 7 of *Jonny spielt auf,* as Evelyne's voice travels to Adam, just as Anita's voice travels to Max. When Evelyne comes into (metaphorical) sight, Adam introduces himself briefly while Hein whistles a variation of the Malpopita melody in the background. This is another example of Goehr's imaginative vocal writing, as the high melody line would have also been suitable for the flute. This decision further emphasises the importance of the voices in the opera and their forefront in the composition.

The following scene sees the return of mechanical representation in the voices. This time the voices resemble the motor of the ship's engine by singing 'rrrt-hep'.[33] Goehr also re-introduces the technique of *Sprechstimme* to accentuate the machinery. The ship's engine is introduced with a whistle (indicated in the score), with the instructions 'The notes give the approximate intervals for the *Sprechstimme*'.[34] The engine voices are instructed to sing away from the microphone, whereas the soloist (also instructed as *Sprechstimme*) is told to sing closer to it.[35] These instructions indicate which voices are in the foreground and the backdrop engine sounds, which take the place of visual scenery. When the instruments enter, they somewhat contradict the mechanical sound of the voices by playing soft chords, alluding to the romanticism of the previous movement. This reminds the listener that even though the voices imitate the machines, these machines are virtuous, as they are carrying the crew to freedom, to nature, to the utopia of Malpopita.

As the journey to Malpopita continues, Adam and Evelyne fall deeply in love, which is clearly heard in their love song. Here the music is littered with romantic techniques, with lush chords, references to nature and deep expression of emotion. At the beginning of the 'B' section of the love song, the tempo instruction is 'Sehr langsamer

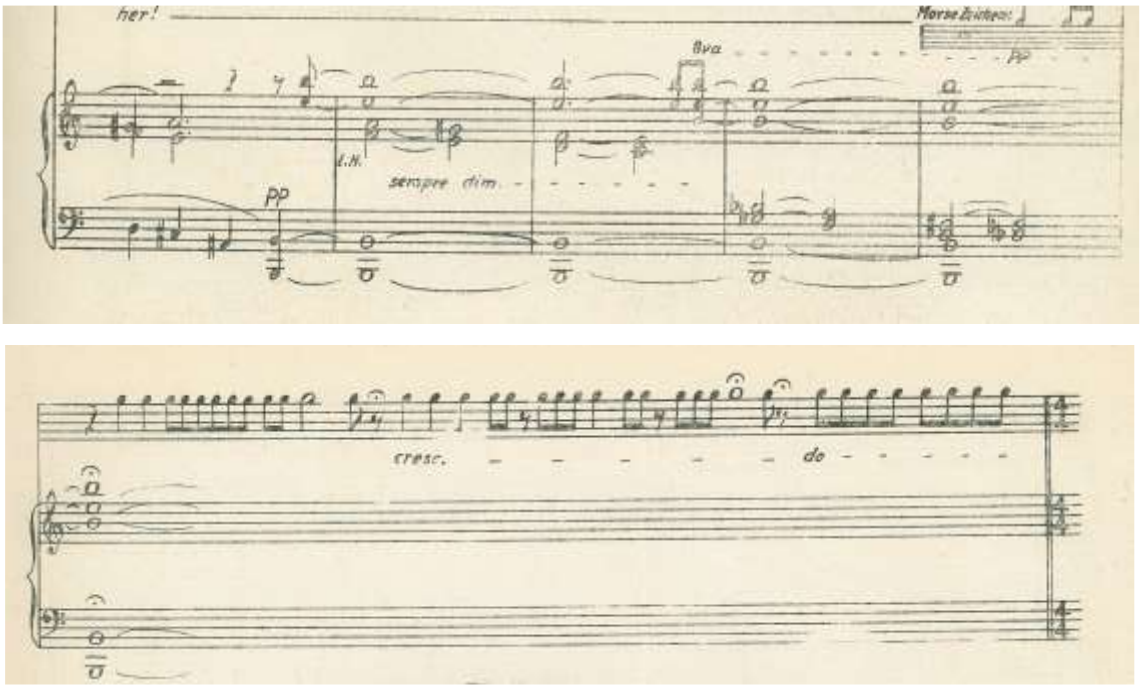
[32] Ibid., 42.
[33] Ibid., 46.
[34] 'Die Noten geben die ungefähren Intervalle der Sprechstimmen an,' ibid.
[35] 'gespr., weit vom Mikro,' ,gespr., näher am Mikro, ungefähre Intervalle,' ibid.

Walzer' (very slow Waltz).[36] This waltz however, does not resemble a traditional Viennese waltz. Where the vocal melody conforms to a slow waltz, the accompaniment doubles the melody and has a repeated dotted quaver-semiquaver-crotchet rhythm. This two-note repeating rhythm distorts the 3/4 feel to the waltz, alongside the absence of the traditional 'um-cha-cha' waltz rhythm in the bass. This love song then is a paramount example of Weimar modernism, as it borrows techniques from the past whilst attempting to distort tradition.

This romantic duet is interrupted by the steersman Richard, calling Adam back to work. Things become heated and the captain calls for calm. The *Sprechstimme* technique is used once more and the accompaniment inserts some short accented, panicked chords. This represents the fight scene and there is a clear presence of the knife, which the audience cannot see, but can be heard in the slashing sounds in the music. It is down to the voices of Adam and Richard to convey tension and aggression here. After the captains instructions (delivered through *Sprechstimme*), the crew and the music begin to calm down. The voices seem to imitate a fugue pattern until page 59 where they rhythmically join to create a homophonic texture. The undulating, intertwining voices represent the waves of the sea in this scene, creating an almost lullaby effect. The music begins to fade and suddenly rhythmic beeping can be heard. This is labelled in the score as 'Morse Zeichen' or 'Morse Code'.[37] The recognisable Morse code rhythms are slightly distorted in their musical notation (see figure 14). The language of disaster is emphasised by the crescendo. Goehr uses this method of communication here to show the audience that danger is looming. This danger is the government ship in pursuit of them. Adam realises he is on is a smuggler's ship and declares that there is injustice everywhere.[38] The crew begin to panic and frantically try to escape the government vessel.

[36] Ibid., 52.
[37] Goehr, *Malpopita*, 63.
[38] Adam: 'Unrecht überall!' Ibid., 72

Figure 14: *Goehr, Mendelssohn and Seitz, Malpopita: Kleine Funkoper, (Piano and Vocal Score: 1930),63-64.*



Throughout the pursuit, Goehr's use of sonic craftsmanship is again evident. His use of rapid *Sprechstimme* against short, sharp notes in the accompaniment create a sense of panic. Once more, Goehr clearly indicates microphone positions in the score. For example at rehearsal mark C he uses the directions of 'weit' and 'nähe' meaning 'far' and 'near'.[39] Later in this section he uses the directions of 'Am Mikro' (at the microphone) to indicate the foreground voices.[40] These directions are necessary as the texture of the music is notably dense during these moments, meaning a complex layering of sounds. The voices singing near the microphone are clearer to the listener, and can be identified as the primary sound. The voices which underpin the prominent speech represent the crew and the ship's engine, with the return of the 'rrt, hep' motif, where the voices create the sound effects. The music gradually becomes more frantic as panic spreads and the ship gains speed. The triplet patterns and fast scalic passages in the accompaniment assist in creating a sense of urgency. Whilst the crew are frantically trying to escape, Adam realises that his true love is flawed (as she was part of the smuggling) and he laments this revelation. He sings that she is lost and slipping away on a descending sequence, symbolising her downfall into capitalism and the beginning of the shattered illusion of the island of

[39] Ibid., 67.
[40] Ibid., 68, 69.

Malpopita. Even Evelyne, the image of perfection in Adam's eyes, has been tempted by money and crime, hinting that the utopian island of Malpopita will do the same.

Following this lament, the music picks up speed again and enters into a Stretto. The Stretto is a traditional operatic technique which comes at the end of an aria, typically faster with greater textural complexity. The tempo marking in the score is 'Stretta (so schnell wie möglich)', translating to 'Stretto, as fast as possible'.[41] This Stretto has a strict rhythmic feel of three in a bar, creating a fast dance which descends into chaos. The crew are singing of drinking and dancing, they are optimistic and delusional as they crash into a reef and become shipwrecked. The listener is reminded of the tavern scene as aspects of the accompaniment somewhat resemble a sea shanty, alluding to the idea of the leitmotif. The audience can associate the sea shanty with a tavern, so can deduce that the crew are drunk during this point of the pursuit. The Stretto ends suddenly with a gong underpinned by loud tremolo chords.[42] This symbolises the crashing ship, bringing an abrupt end to this chaotic scene.

When the crew wake up and attempt to salvage the wreckage, they appear to find themselves on the island of Malpopita. At the beginning of this scene the music contrasts with that of the previous scene of chaos. The thinner, lighter accompaniment suggests sunlight and a calm atmosphere. Hein realises where they are and begins to speak over the music, narrating to the listener the events since the crash. It could be interpreted that this soliloquy is happening inside of Pete's head. He is certainly in conversation with himself, reflecting on the recent events and what the future holds. This is of course a dramaturgical solution in communicating to the listener the surroundings of the island. It is almost as if he is taking the role of a radio announcer, as his dialogue alternates between communicating facts and his opinions on the matter:

> So strandete also die Yacht Esperanza auf der Insel Malpopita! Hatten Glück kan man sagen. Sind alle nochmal mit dem Leben davon gekommen. Eine verfluchte Geschicte! Käpten Parker tobte wie ein Stier, als er sah, dass der Kahn zum Teufel war.
>
> So the yacht Esperanze ran aground on the island of Malpopita! It was a stroke of luck one might say. All lives were saved. A damned business! Captain Parker raged like a bull, when he saw the vessel was done for.[43]

[41] Ibid., 76.
[42] Ibid., 80.
[43] Ibid., 80-81: Translation from the 2005 CD Booklet, 49.

Following this, Hein starts to sing his analysis, which gradually becomes more reflective than factual as he re-enters the musical world. The music slowly progresses into a 'slow foxtrot', a dance associated with popular jazz.[44] The use of jazz on the tropical island of Malpopita, reflects the utopian connotations of jazz within the Republic as well as its 'otherness'. During the foxtrot, Hein begins to miss his old tavern, showing a touch of nostalgia, even if its rum turned his stomach. It can be interpreted that the presence of jazz appears to disturb the 'pure' sound of the tropical island, which was created at the beginning of the scene, as ideas of drunken taverns and popular music enter its midst.

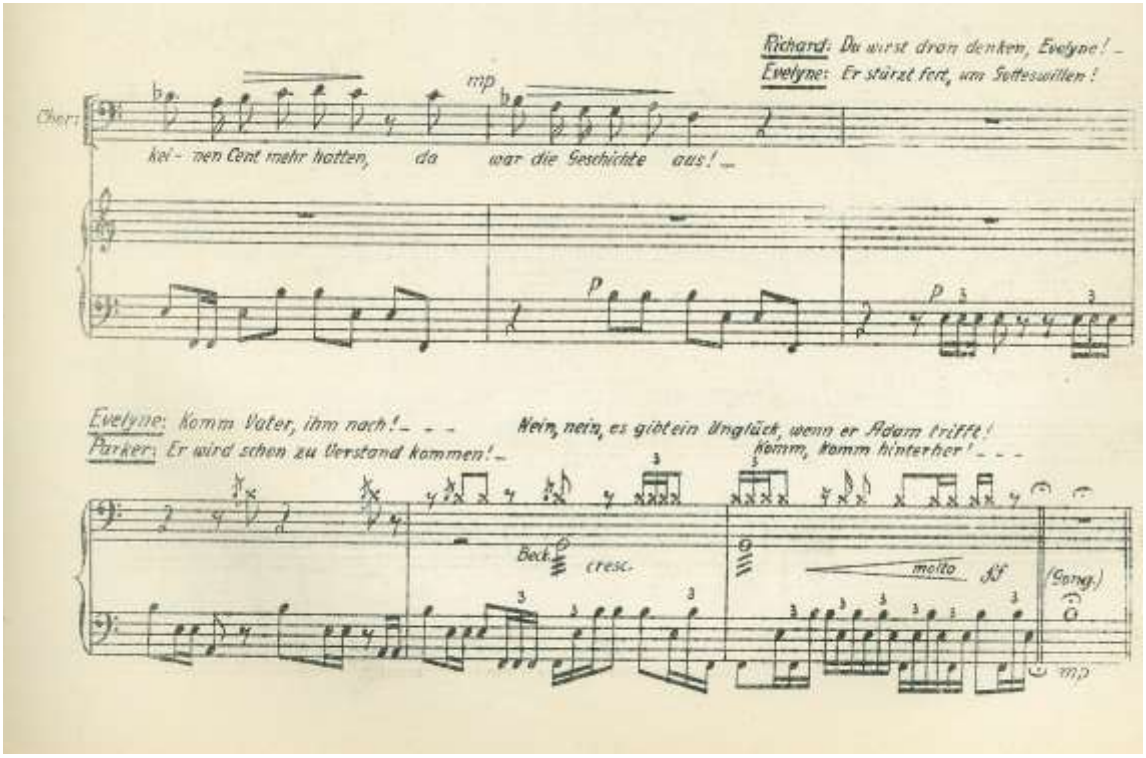
At rehearsal mark B, Adam and Evelyne's voices join the music, which evolves into a slow waltz. The vocal line becomes extremely chromatic and the accompaniment returns to its previous lighter texture. Adam and Evelyne's lines intertwine as they are mesmerised by the island. Their love is momentarily deflected from each other to Malpopita. The captain, like Hein, does not seem to share his crew's affections for the island. His complaints are underpinned by his use of *Sprechstimme,* contrasting the lyrical lines of Adam and Evelyne. A spoken Bass solo indicates his displeasure of 'Boredom, no hope, no whiskey, no freight'.[45] Then there is a snapshot reprise of the *Malpopita Lied,* as if to remind the crew (and the listener) of their earlier desire for the island.[46] At rehearsal mark E, the sound world changes once more. Adam is sent off with a group of men to go and find the other crew members. The texture becomes lighter here as Adam bids farewell to Evelyne.

The following scene sees the remaining crew constructing a new home on the tropical island. The scene opens with the directions of 'Händeschläge', meaning 'hand hits'. This can be interpreted as harsh claps, indicating Parker's instructions of 'You others to work'.[47] This is followed by a soft drum pattern, which develops throughout the scene, creating the foundation for the male chorus, as they take on a workers' march. They sing of Jonny (one assumes that this is the Jonny which the earlier tavern is named after) and his family. The drums create the sound effect of carpentry as the workers construct houses. This song is interjected with dialogue. Richard (the steersman) asks the captain if he can take Evelyne for his wife. The

[44] Ibid., 83.
[45] Ibid, 87
[46] Ibid, 88
[47] Ibid, 92.

captain replies saying Evelyne can do what she wants. Evelyne refuses as she is in love with Adam; at this point a snare drum enters, as if creating a drum roll to introduce trouble. Richard's response is that he will break Adam's neck and goes off in pursuit of him. As Evelyne cries out for her father's help, the drumming becomes more chaotic and the snare drum returns with a gong climax (see figure 15). The absence of pitch instruments in this scene, gives more emphasis to the voices, creating a natural, pre-mechanical working environment where machinery is non-existent. This is in contrast to the heavy, mechanical factory environment from the opening of the opera. The workers on the island have no machines, just wood. Their simplistic work song also reflects this, whilst drawing attention to the dialogue. The panic is built up in the rhythm, rather than the pitch, as the voices are spoken, whereas the workers sing their words. This gives the performers the duty and freedom of expression in their argument, again showing Goehr's awareness of the new medium and the potential of radio drama.

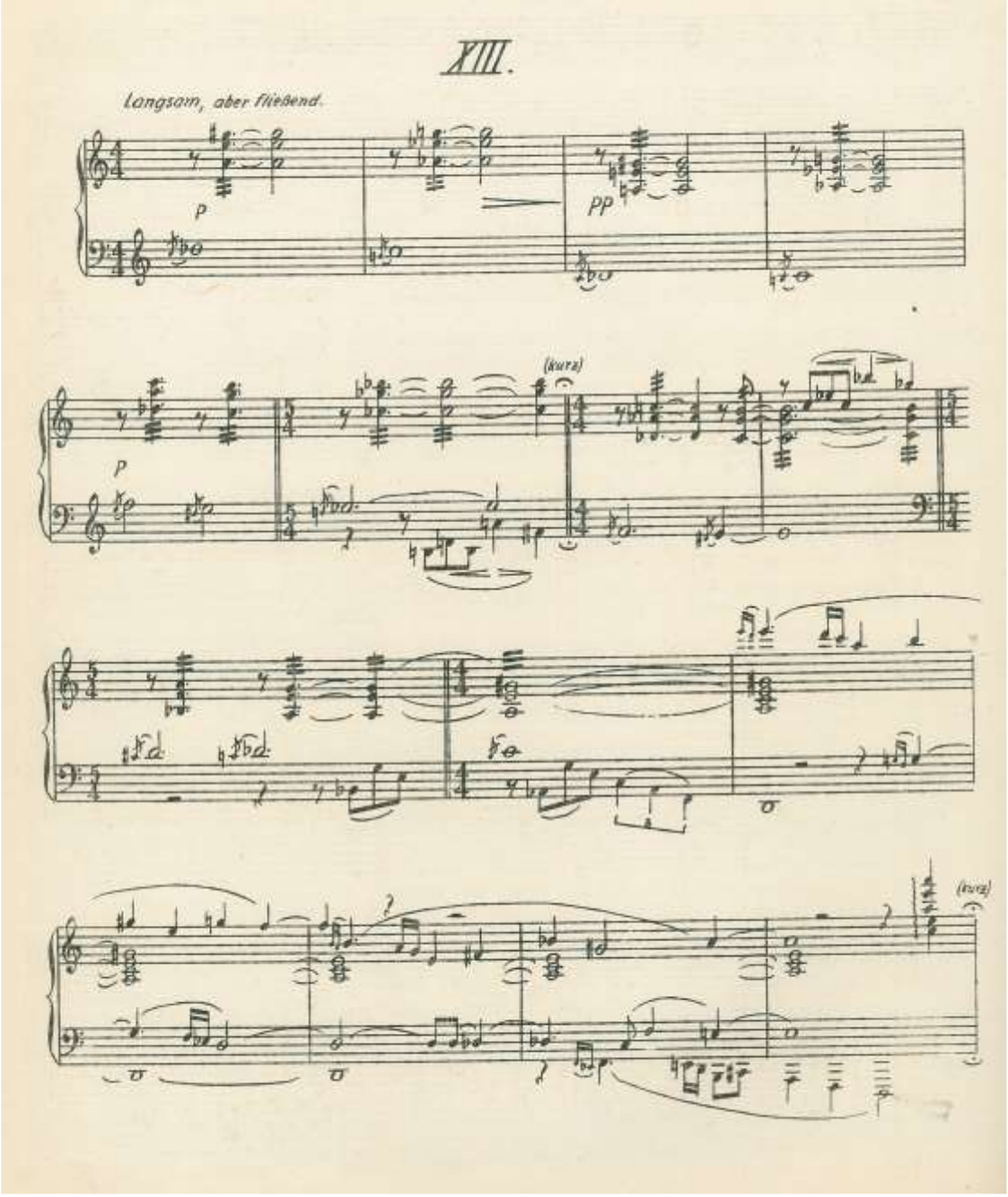
Figure 15: *Goehr, Mendelssohn and Seitz, Malpopita: Kleine Funkoper, (Piano and Vocal Score: 1930), 95.*



The action then switches to Adam and the search party as they look for the remaining crew on the island. This scene is introduced by a semitone acciaccatura motif with soft tremolo chords on top.[48] This creates a calming contrast to the previous scene, and reminds the listener of the tropical scenery, compensating for the lack of a visual set. These chords indicate light tropical breeze (see figure 16). The time signature is 4/4 with a 6/4 bar to add a sense of freedom and to accommodate the recitative. A high melody, suitable for the flute (which Hannon indicates in his 2004 orchestration), floats in and is answered by lower instruments (most likely a clarinet/oboe and then bassoon). This flowing melody alludes to bird song and gives the impression of fresh, open air.

[48] Ibid., 96.

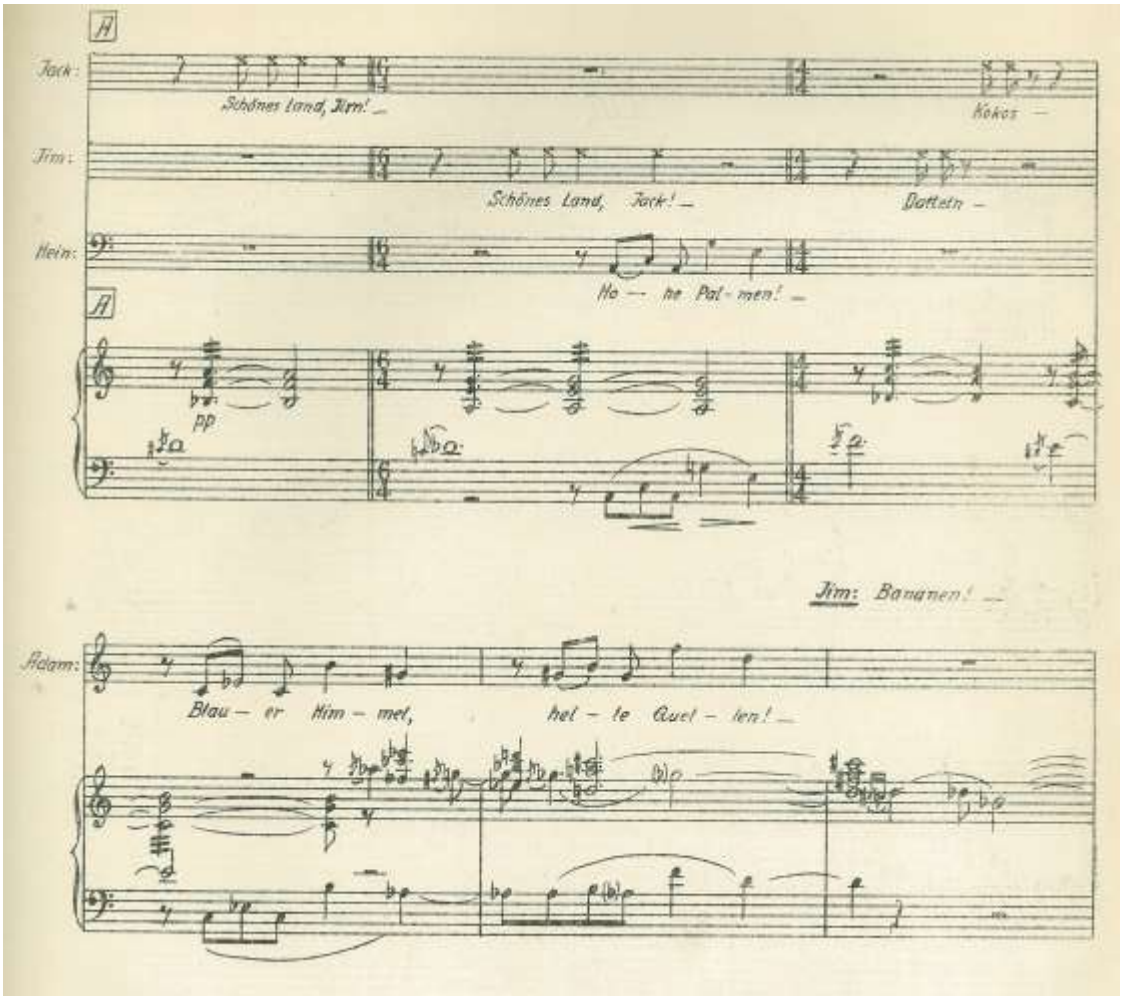
Figure 16: *Goehr, Mendelssohn and Seitz, Malpopita: Kleine Funkoper, (Piano and Vocal Score: 1930), 96.*



After this introduction, dialogue begins between Jack, Jim and Hein. They speak and sing of the beautiful land on which they find themselves, spotting coconuts, dates, high palm

trees, pineapples, blue sky and sparkling springs.[49] Here the techniques of word painting and 'mickey-mousing' are applied.[50] For example, when Hein sings of seeing high palm trees, the interval between 'Hohe and Palmen' is a minor 7th, a leaping interval, indicating the height of the palm trees (see figure 17). This is also emphasised by the doubling of the vocal line in the bass line.

Figure 17: *Goehr, Mendelssohn and Seitz, Malpopita: Kleine Funkoper, (Piano and Vocal Score: 1930), 97.*



Additionally, when Adam sings of blue skies and sparkling streams, 'Blauer Himmel, helle Quellen', the chords change more frequently, with a higher tessitura. The semitone

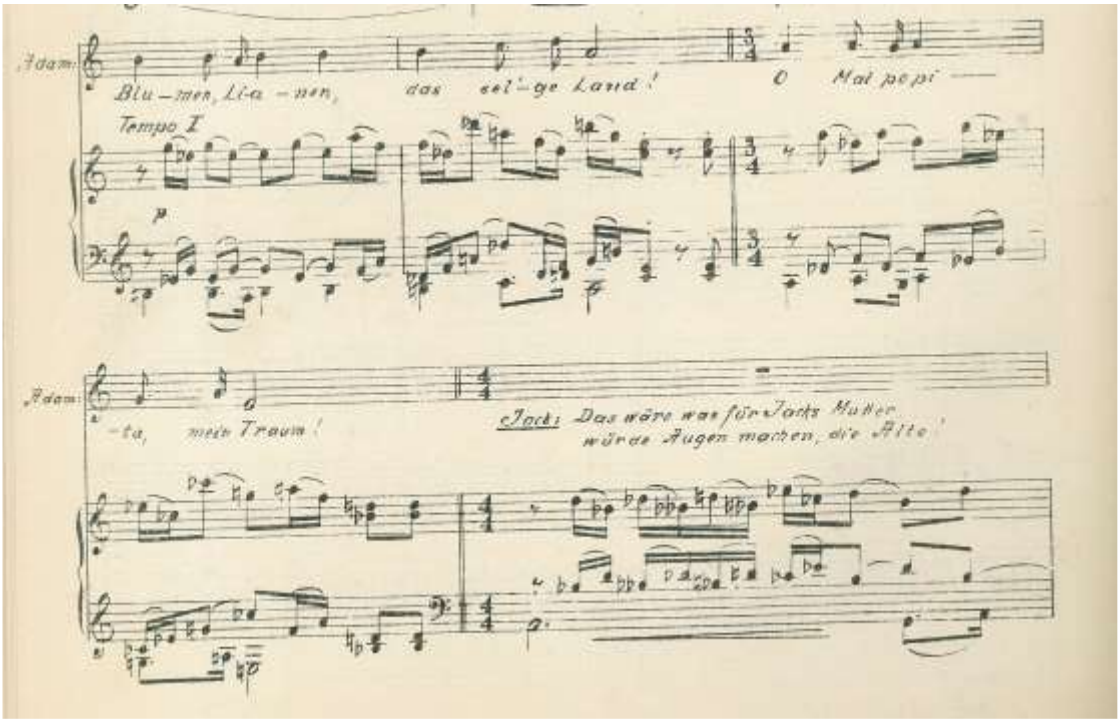
[49] Ibid., 97.
[50] 'Mickey-mousing', a predominantly a film music technique, is where the music directly mimics an action. For example an object drooping can be echoed by a trombone slide/glissando. Even though it is a film music technique, essences of this technique can be heard in this radio opera.

acciaccatura and high tremolo chords in this motif create the sparkle of the stream and sky.

At B Adam once again sings of his love for the island. The music here is reminiscent of the *Malpopita Lied*. Here the melody is doubled in the accompaniment, underpinned by tremolo overtones. The flowing dotted melody and light tremolo notes reflect Adam's dream of Malpopita, whilst Jack and Jim reflect on their years of hard labour through *Sprechstimme*, underpinned by heavy chords and percussive notes, a filthy, dirty contrast to the music of Malpopita.[51] The music reverts to its original aesthetic when the two thank God for the island.[52] The 'mickey-mousing' technique is used again at Figure D, where rapid tremolos represent the butterflies, as indicated by Jack. As Adam reprises his opening melody the accompaniment is altered. The treble line falls in 3rds (a selection of major and minor) and the bass line inverts it, almost as if reflected in a mirror (see figure 18).[53] Here the text is 'Flowers, lianas, the happy land. Oh Malpopita my dream!' The use of the word repeat of the word 'dream', along with this musical accompaniment, emphasises Malpopita as a fantasy, an ideological concept, and the listener begins to question whether Adam is actually experiencing these events, or is in fact dreaming of them whilst still in the factory.

[51] Ibid., 99.
[52] Ibid., 100.
[53] Ibid., 1 bar after D, 100.

Figure 18: *Goehr, Mendelssohn and Seitz, Malpopita: Kleine Funkoper, (Piano and Vocal Score: 1930), 100.*



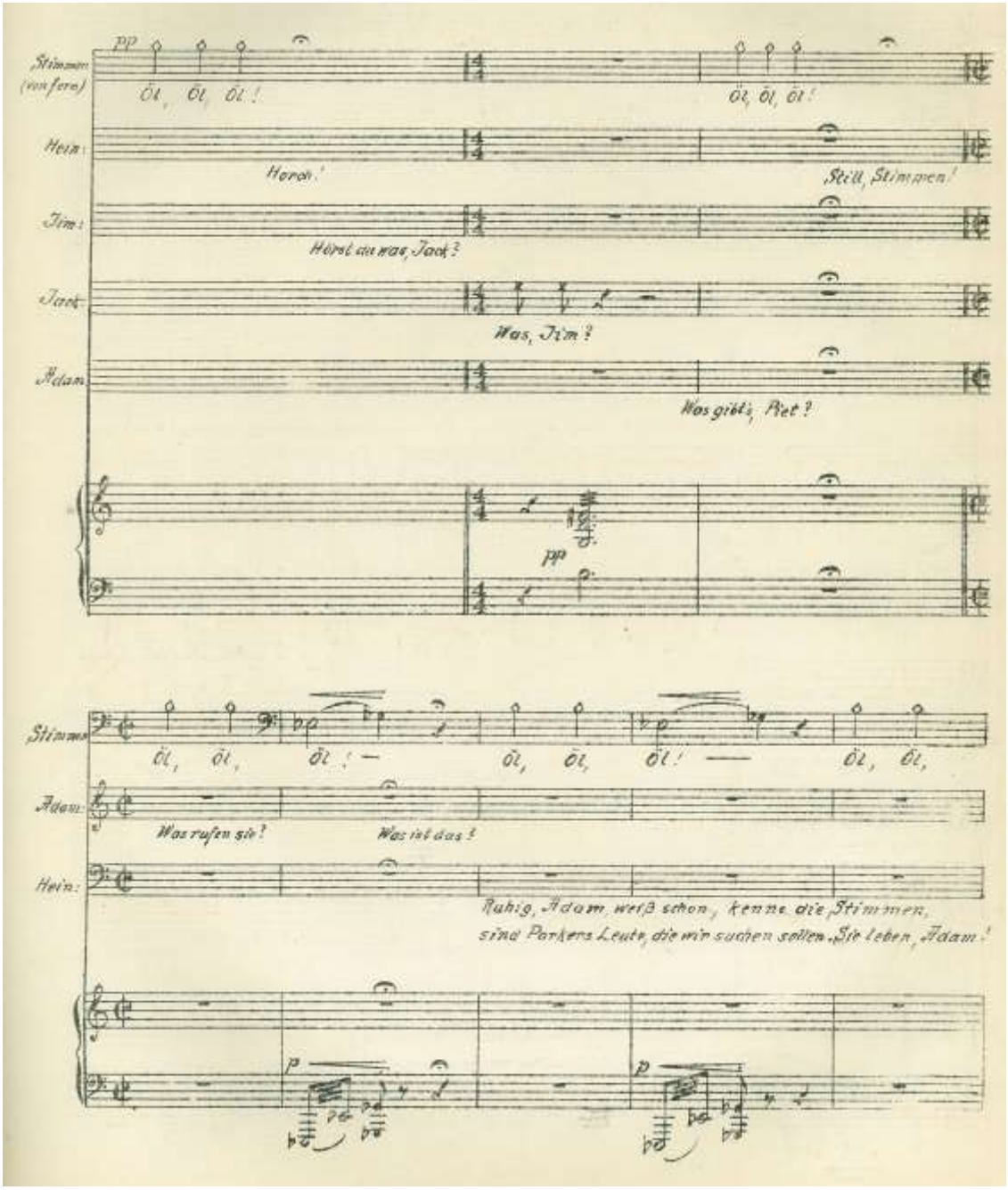
Jack and Jim continue to remember the past, reflecting on the grey houses of Liverpool. They are brought back to the island with the semitone motif overlaid by tremolo chords, as Adam says 'Here is the world.'[54] The high, flowing melody is heard once again as the music begins to quieten and descend in tessitura, as Adam says 'Yes comrades here is the world, here is freedom! No master, no servant! Just us, only us! Human beings!', and the accompaniment fades into silence as the others agree with him.[55] The absence of music here allows the human voices to be free, autonomous beings, symbolising their escape. The brevity of this silence is reflected by the short time of paradise which Adam experiences, as this peaceful freedom is crudely interrupted by the chorus, who have found oil.

Suddenly a faraway voice can be heard shouting 'Oil, oil, oil!'[56] The men contemplate it as it gradually gets louder. To begin with it uses high *Sprechstimme* which

[54] Ibid., 101
[55] 'Ja Kameraden hier ist die Welt, hier ist Freiheit! Kein Herr, kein Knecht! Nur wir, wir ganz allein! Der Mensch!' Ibid., 102.
[56] 'Öl, Öl, Öl!' (von fern), Ibid., 103.

slowly becomes interjected with sung notes, in low, rising minor thirds, punching their way through. This is underpinned by a low, soft tremolo. The music here suggests that the oil is something sinister, like a shark lurking in the water, ready to pounce and spoil their life on the island (see figure 19). During this discovery of oil, Evelyne is trying to stop Richard's pursuit of Adam. A staccato, chromatic, descending quaver motif accompanies this chase (one might argue it is somewhat reminiscent of Grieg's hall of the mountain King). As the chase persists, the 'oil' voices become louder and gravitate towards the tonal centre F, the same note used for the word 'oil' in the opening. This is to perhaps emphasise the full circle of which the opera is about to complete. There is constant pressure within the music to revert back to the initial factory setting, somewhat a conflict to the utopian island. Even Richard is distracted from his pursuit of Adam and is seduced by the prospects of oil.

Figure 19: *Goehr, Mendelssohn and Seitz, Malpopita: Kleine Funkoper, (Piano and Vocal Score: 1930), 103.*



Within the excitement, however, Adam gives his comrades a warning. He tells them that if they farm the oil which they have found, they will ruin the island and Malpopita will descend into hell. This is underpinned by thick dissonant, accented chords and the rising minor thirds in the unison male voices. This conveys their excitement in finding the oil, whilst also communicating its threat (see figure 19). The crew ignore

Adam's warnings and get to work on extracting the oil. At rehearsal mark K the tempo marking is 'Andantino a la Blues'.[57] The altos and tenors sing around a chromatic scale 'Arbeit, Arbeit…' (Work, Work…). The rhythm here has a long-short pattern which is characteristic of blues writing and the voices sing in unison, creating a homophonic texture with the accompaniment. It could be argued that the blues aesthetic in this section ignites the listeners' popular memory back to the slave trade, in order to communicate that the crew are enslaved by the oil and their desire to make money from it. Following the blues section, the crew reprise the opening words of 'gold is good but oil is better'.[58] At letter 'M' the crew begin to sing work sounds, just like the factory scene at the beginning of the opera.[59] Goehr is reverting back to factory imagery and once again using the human voices to convey the aesthetic to the listener, rather than sound effects.

By page 125, the 'Malpopita oil company' is fully formed. This is indicated by a sung statement in the form of a homophonic, lento fanfare, which begins on a D major 4th chord, with a slowly descending bassline. The false relations in these chords add to the dissonance created to show how the beautiful island of Malpopita had been corrupted by the formation of the oil company. This becomes even more apparent on the word 'oil', where the chord (starting in the bass) is Bb Eb F Bb F# which falls to Ab Db Eb Ab F#.[60] The clash of the Eb, F and F#, and then Db, Eb and F#, show how the oil has polluted the island and its new population. This announcement of the 'Malpopita Oil Company' continues for two more pages.

When Evelyne begins to be seduced by the prospect of an oil company, Adam pleads with her to not to get involved in such business. He begs her to stay with him and live in peace on the island, away from the factory. However Evelyne is seduced by the oil and tells Adam she must part from him. As she is saying this, a fast ostinato pattern on the words 'Malpopita oil is the best' is sung quietly by the chorus, which is instructed to be away from the microphone.[61] This is not simply a work song sung as the workers extract the oil, but also act as the voices inside Evelyne's head which are persuading her to choose oil over Adam. The tenor voices, which are instructed to be nearer the microphone, sing 'We will be rich and we will be happy' as the ostinato in the other

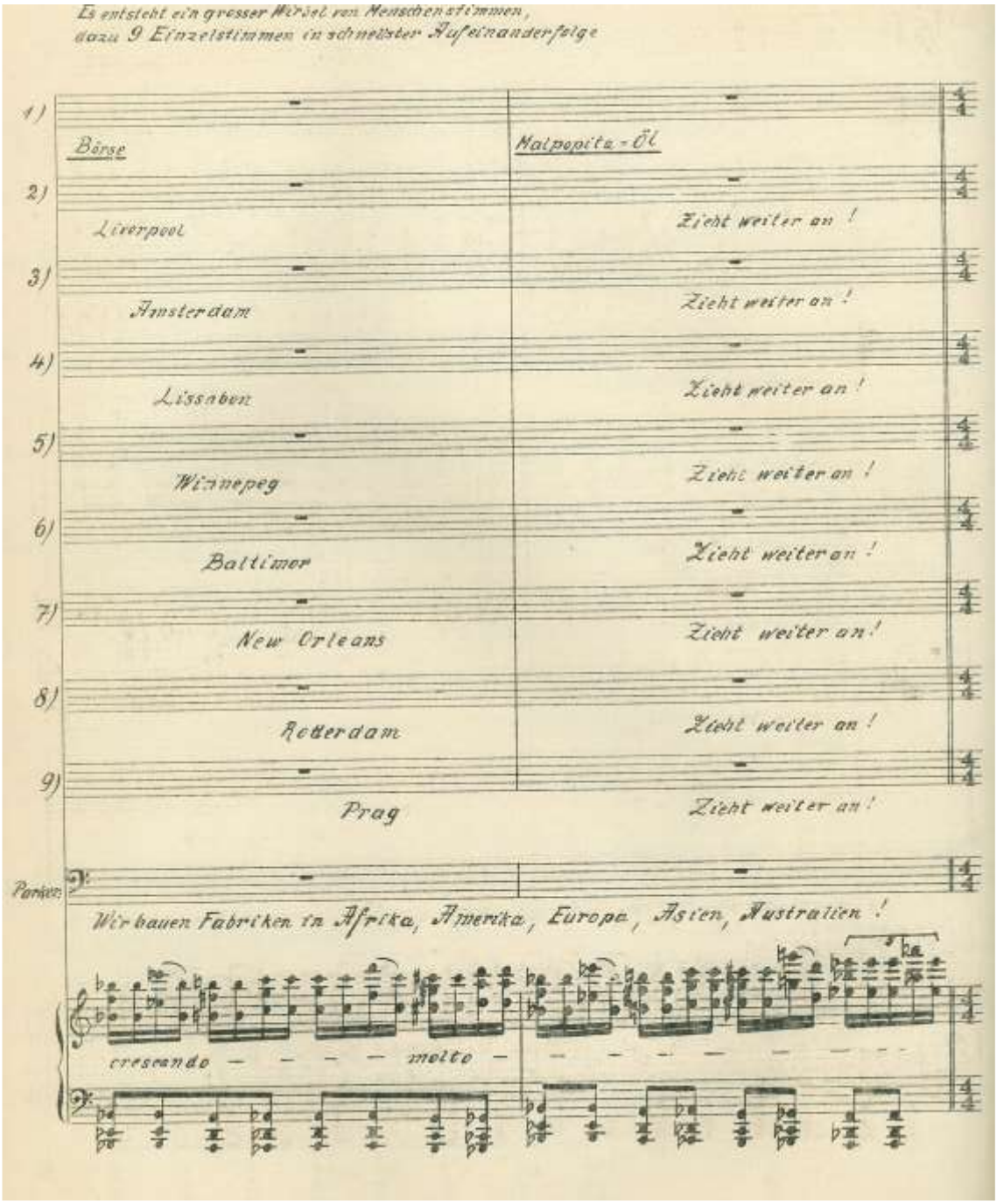
[57] Ibid., 117.
[58] Ibid., 120.
[59] 'träuft', 'schleift', 'Fließband', 'Hammer', Schlag', band,' 'Hammer', Schlag', ' Goehr, *Malpopita,* 121-123.
[60] Ibid., 125.
[61] 'Malpopita Öl ist das Beste,' Goehr, *Malpopita,* 129.

voices becomes louder.[62] As the monotonous ostinato figure repeats there is a marked saxophone melody to accompany the ostinato and the advertisement for workers made by Richard.

When this section finally comes to an end, a semiquaver pattern introduces the direction 'There is a great swirl of human voices, 9 single voices in quick succession'.[63] This whirlwind of voices are clearly labelled in the score and the names of global cities are written slightly after each other down the page (see figure 11), indicating the stock exchange for the oil company. After the cities are announced the voices cry in unison that the stocks continue to grow (see figure 20). Underpinning this cyclone of voices is Richard stating that they are 'building factories in Africa, America, Europe Asia and Australia!'[64] If transposed from sound to a visual medium, this montage of voices would become flying images of words and photographs or even a collage of newspaper scenes. An example of this technique in cinema can be seen in Orson Welles' *Citizen Kane* (1941) which includes a newspaper montage, where the action takes place between planes of moving newspaper headlines.[65] Goehr is attempting to achieve this effect with just audio in *Malpopita.* The accompanying music consists of somewhat static semitone patterns (which is similar to the music accompanying the newspaper montage in *Citizen Kane)* to blow the voices through the airwaves.

[62] 'Wir werden reich und wir werden froh!' Goehr, *Malpopita,* (tenor line), 130.
[63] 'Es ensteht ein grosser Wirsel vom Menschenstimmen, dazu 9 Einzelstimmen in schnellster Aufeinanderfolge,' Goehr, *Malpopita,* 134.
[64] Richard:'Wire bauen Fabriken in Afrika, Amerika, Europe, Asien, Australien!' Goehr, *Malpopita,* 134.
[65] *Citizen Kane*, directed by Orson Welles, (1941; RKO Pictures, Mercury Productions; Universal Pictures UK, 2004), DVD.

Figure 20: *Goehr, Mendelssohn and Seitz, Malpopita: Kleine Funkoper, (Piano and Vocal Score: 1930), 134.*



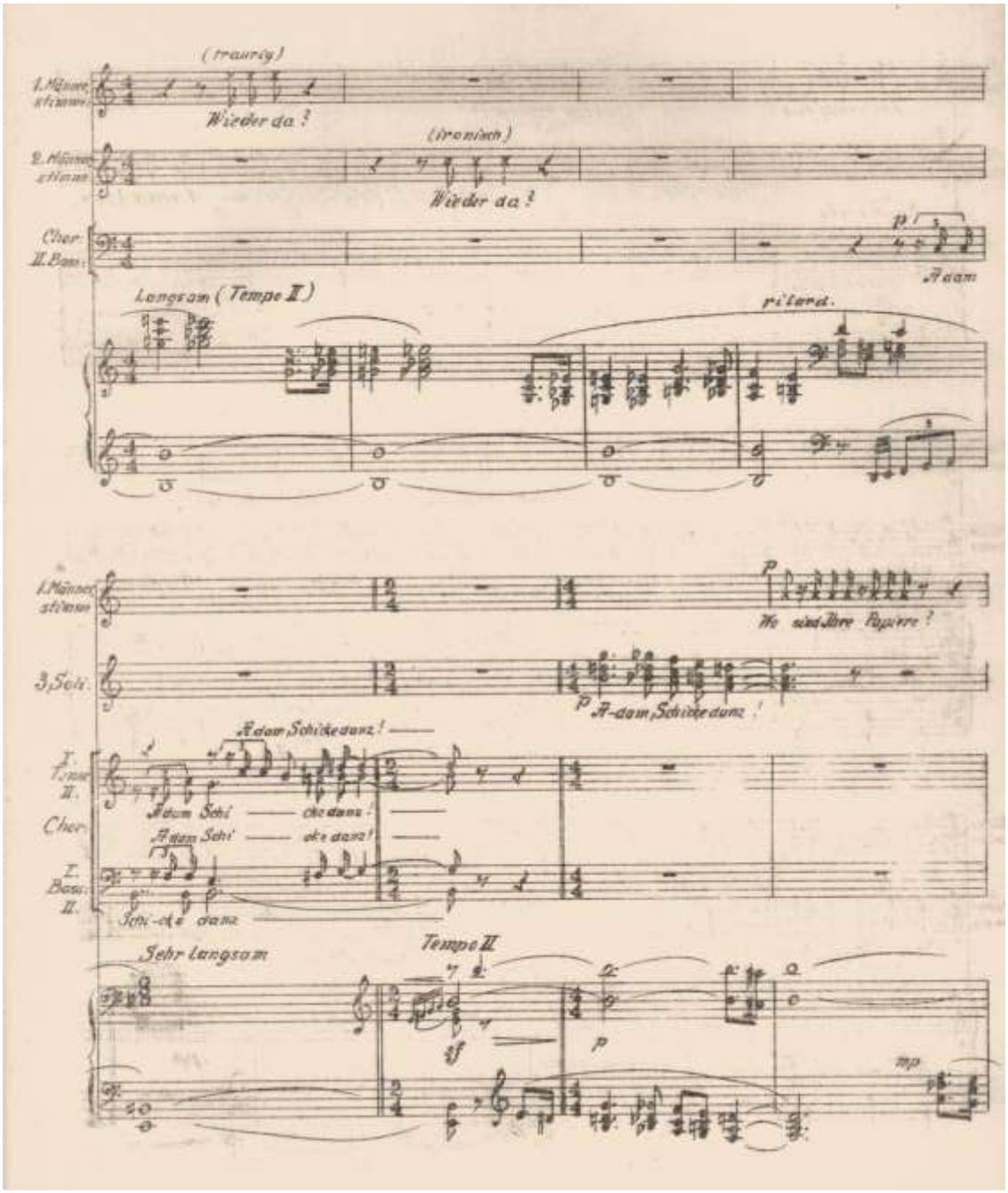
After the oil company montage, the music reverts back to the opening of the opera. The listeners can once again hear 'Work, Oil, Work, Oil!' through the radio speaker.[66] This symbolises the full cycle through which the opera has turned; from monotonous work, to daydreams, to a glimpse of utopia, to corruption and back to factory life. This is

[66] Goehr, *Malpopita*, 135.

also represented in the return of the 'Motor, Traktor' motif. After a reprise of the factory work scene, the wages song is also repeated. This time however, when Adam's name is called, the music slows down, creating a slight sense of mystery.[67] This is also present in the descending semitone motif. The factory foremen, in a somewhat mocking fashion, say (using *Sprechstimme*) 'back again?' [68] The music then slows down once more and the chorus of men call Adam's name in weaving triplet figure (see figure 21). This creates an echoing effect, which alongside the semitone melody in the accompaniment give the sense of waking up from a deep sleep. This is emphasised by the three solo female voices which answer the male choir in descending chords in the first inversion, creating parallel 6ths and 3rds. This harmony, and especially its presence in the female voices, creates a sense of daylight awakening.

[67] Ibid., 142-143.
[68] 'Wieder da?' (Stage directions: *traurig, ironish),* Goehr, *Malpopita*, 143.

***Figure 21**: Goehr, Mendelssohn and Seitz, Malpopita: Kleine Funkoper, (Piano and Vocal Score: 1930), 143.*



Adam finally responds to the questions from the foremen in a defiant manner and presents his book. The foremen and present him with his number, 957, which Adam repeats. Underpinning this, the bass chorus sing ‘Move on, move on, move on…’ in a

recurring semi-tone pattern which is similar to the 'Motor, Traktor' motif.[69] This not only indicates Adam's stasis, but to underline the continuous, monotonous cycle of factory life. The opera ends with a short instrumental figure, which alludes to the *Malpopita Lied,* which slows and diminuendos into a long pause on an A minor chord, as if to indicate the sad decline of the beautiful island of Malpopita, whistfully reflecting on the lost dream.[70] There is a strong argument that the ending of the opera indicates that Adam did not leave the factory and dreamed his adventure. He may have been woken up by the foreman constantly calling his name and then accepts his fate of factory life, as he realises that even his daydream was spoilt by greed and oil. Whether this was Goehr's intention or not, is indeterminable, however, what is clear is the full cycle the opera has turned, which is apparent in both music and text. The listener can recognise the return to the factory setting instantly by the repetition of the music and human machine noises from the beginning of the opera, consequently presenting a pessimistic message of the helpless state of modern capitalism.

THE THEMES OF *MALPOPITA*

The themes of *Malpopita* are in tune with other works of art from the Weimar Republic. In 1929, the Wall Street crash in America had a direct impact on the German economy due to the economic deals made by Stresemann during the mid-20s. The depression had a direct impact on the arts at the end of the Republic, encouraging obvious political and economic themes in opera and *Malpopita* is no exception. The work's socialist content is similar to Brecht and Weill's *Aufsteig und Fall der Stadt Mahagonny* (1930) where the protagonist, Jimmy Mahoney, and his friends build a city where they can live as they wish. For a while their new lifestyle works, but the city descends into greed, debauchery and death, which is attributed to modern capitalist values.

Both *Malpopita* and *Mahagonny* present utopian worlds which human beings discover. They also present the ideology of a promised land, which becomes spoilt by humans, who become dehumanised when they are forced to live in the new worlds which they have created. Both works delve deeper into biblical imagery. In act 3 of *Mahagonny,* Jimmy is put on trial for his crime of having no money and is sentenced to death. He reminds the crowd of the existence of God and the people of Mahagonny act out the play of 'God came to Mahagonny', in which God condemns the town but is shouted down by

[69] 'Weiter, wieter, weiter…' Goehr, *Malpopita,* 145.
[70] Ibid.

its people. They protest that He cannot send them to hell because they are already there! In *Malpopita* Adam warns the crew that if they continued in their pursuit of an oil business it will lead them to hell, but they do not listen. Evelyne too is seduced by the prospects promised offered by capitalism and tells Adam she will have to part from him if he does not wish to be part of the new crusade. His presence in the factory at the end of the opera, whether waking up from a dream or not, suggests that she has persuaded him to follow her and join the factory. As already discussed, when the oil is first discovered, the music clearly presents it as a threat, even a monster. It could be argued therefore that the oil represents the serpent from Genesis, posing a threat the Garden of Eden, which is represented by the island of Malpopita. When we consider this allegory, the choice of names for the characters Adam and Evylene (or Eve) is clearly explained. The biblical references help to explain the corruption of the world imposed by capitalism, which is signified by oil in this opera.

Just like *Malpopita,* Ernst Toch's *Der Fächer* (1930) portrays radio's relationship to the sea. It is a comedy set in Shanghai which portrays the contrasts between the mythical realm and the western world. Alexander Rehding describes the radio scene in this opera as a musical montage, which includes fading and interruptions.[71] In this scene Toch includes his own quotation from *Die Prinzessin auf der Erbse.* The opera embraces radio as a new medium, by portraying it as a medium for inviting the rest of the world into one's home. The scene communicates radio's ability to transmit a variety of musical styles all over the world, which according to Rehding, is in contrast to Strauss attempting to reveal the bourgeois characteristics of radio in *Die ägyptische Helena* (1927).[72] In the opening of Strauss' *Helena,* the heroine is seen to be communicating with an omniscient shell, which Rehding believes to be acting as a radio. This is not a medium for audiences here however, but is reminiscent of a talking device. Helena is seeking information on her lover, but the voice from the shell is being cryptic. Rehding emphasises that the shell appears to produce white noise and the rustling of the sea (which came from the orchestra).[73] His comments on *Jonny* appear more brief, asserting that the use of radio in this *Zeitoper* show radio's acceptance of romanticism.[74] The radio communicates many

[71] Alexander Rehding, 'Magic Boxes and Volksempänger: Music on the Radio in Weimar Germany,' in Nikolaus Bach eds., *Music, Politics and Theatre in Germany: 1848 to the Third Reich,* (Ashgate; Aldershot 2006), 255-272, 262.
[72] Ibid., 263.
[73] Ibid., 261.
[74] Ibid., 266.

musical styles to the listener, including popular, classical, romantic and modern. Goehr also highlights the distinction between the exotic and the western world through clever compositional techniques. Aditionally, just like Strauss, Goehr uses the radio as a method of communication, as well as symbolising its early use of communicating at sea. This is shown by the presence of Morse code when the ship is headed into danger.

The suitability of radio to both progressive *and* traditional operatic works can be seen in Rehding's discussion of the use of radio within Weimar opera. He writes:

> And yet, the double origins of the radio, as the achievement of both occult and technological advances, filtered its way into musical art in the Weimar Republic. In this way, the radio was probably unique in being deemed suitable for both progressive and traditional operatic projects of the 1920s.[75]

Malpopita was the first opera in Germany to consider radio as a medium of production rather than reproduction. This enlightened method of operatic production created a whole new realm of experimentation and ways to convey modern, progressive and political ideas to the opera audience. Yet opera is a traditional medium of entertainment, regardless of any new media with which it merges. When one considers how the writings of Warschauer, Schoen and even Adorno, revealed how radio had the power to deliver opera to people's living room, radio had the ability to communicate traditional opera in a progressive fashion. *Malpopita,* though a modernist attempt at opera, does indeed contain traditional operatic elements; the classic love scene between Adam and Evelyne, the struggles of the protagonist, the chorus numbers, political struggles, word painting, romanticism, trios, quartets, recitative, and the somewhat tragic ending, all display characteristics of traditional opera. Therefore *Malpopita* can be viewed as a key stage in the modernisation of opera, not just in the Weimar Republic, but in the narrative of the history of operatic sound design.

The utopia of Malpopita is also a central theme in the opera. As well as an anti-capitalist society, the island also represents the romantic ideal. This is not only represented by the music but in the text. When the crew are headed for *Malpopita,* they sing as if it did not exist: 'Malpopita, Green Island in the far off sea. Only in death does a cloud-boat bear the magic of your coast to us.'[76] The reference to magic suggests that the crew do not believe that the island does not really exist and is just a romanticised

[75] Ibid., 260.
[76] Goehr, *Malpopita,* 38-39: Translation from CD inlay, 40.

dream. The interpretation of *Malpopita* as a dream rather than a real place indicates that when the crew land on the island, it is not literally Malpopita, but a vision of what they believe it is. This is also suggested by the presence of oil on the island, as the real Malpopita would not include such an impurity. The island on which they are shipwrecked therefore is a mere representation of Adam's utopian vision. If Adam's adventures are a dream, then the opera certainly conveys the obsolescence of romanticism in modern society; the evolution of capitalism through factory life has destroyed the need for romanticism, which is shown by the full cycle through which the opera turns.

Furthermore, this opera realises the harsh actuality of capitalist culture. When the crew find the oil on the island, the Malpopita oil company is formed, unmasking the illusion which the commodity of popular music proposes to offer. The desire for an oil company over the tropical island shows that organisation of capitalist production threatens the spirit of mankind, not the technological process itself. The Malpopita oil company also serves as a representation of the demise of competitive and liberal capitalism in favour of the rise of large scale organised industry. Factories are built across the world; the Malpopita oil company dominates the oil industry. The utopian ideology of Malpopita is appropriated to serve capitalist industry, mirroring popular culture of the Weimar Republic, such as authentic jazz was appropriated in hotels and nightclubs for commodity and entertainment purposes

In *The Mass Ornament,* Kracauer provides a critique of capitalism in terms of a so-called mass ornament of bodies and describes this phenomenon as a 'mythical cult'.[77] Kracauer's argument centres on the production line, where everyone performs their task on the conveyer belt, but the function is partial and they do not grasp its totality.[78] What is more, Kracauer often refers to nature, mythology and fairy tales, when natural power is often defeated:

> Since the principal of the *Capitalist production process* does not arise purely out of nature, it must destroy the natural organisms that it regards either as means or resistance.[79]

This is certainly visible in *Malpopita.* Even though the nature of radio opera means that there are no visible bodies (thus the representation of the mass ornament in *Malpopita* is

[77] Kracauer, *The Mass Ornament*, 83.
[78] Ibid., 80.
[79] Ibid., 78.

an invisible one), the opera deals with the myth, or dream, of Malpopita, a tropical island of nature, which in the end is engulfed by capitalism, as it provides it the means (oil) for growth. Additionally, if Adam's experience is interpreted as a daydream, then his leisure time (his travels across Germany, the voyage, and his experience of the tropical island) slowly descends into a commodity, it is exposed just as Kracauer describes, and as Adam awakens, he accepts his fate and slinks back into the mass of workers, forever a slave to the machine.

In addition, themes in Adorno's 1932 essay, 'On the Social Situation of Music', are apparent in *Malpopita.* Firstly Adorno draws upon the alienation of the class consciousness of the proletariat, in particular their consciousness of themselves as *objects.*[80] Adam's awareness of himself as a subject is shown by his spontaneity when leaving the factory environment. The ambiguous dreamlike ending is crucial here; he dreams his escape, showing his awareness of his own consciousness, but his incapability in carrying out the spontaneity which he aspires to. If Adam's journey was not a dream however, but an actual experience, his attempt at liberation fails. It fails because Adam is isolated in his consciousness, which is not sufficient for a revolution, he fails to unite the crew with their own consciousness as themselves as subjects. In addition, Adorno's concern of capitalist dominance in music is another key theme of his critique. He states that as music's value is determined by the market, music is constantly adjusting to social conditions and becoming absorbed by capitalism, resulting in the completion of the alienation of music from man, mirrored in the rationalisation of music.[81] In *Malpopita* this rationalisation is evident in the factory scenes, where the rationalisation of modes of production is reflected in the music. This rationalisation of music can be can also be seen when the oil company is formed; the rationalisation of nature is accompanied by the change of music.

Furthermore, Adorno believed that art should present a reaction towards society and offer a to its audience. According to Adorno, in the modern world music's ability to change society was limited under the superiority of industry, meaning capitalism limited its social responsibility:

[80] Theodor Adorno, 'On the Social Situation of Music,' GS, vol. 18, (1932): 729-777. English translation available in: Leppert, Richard trans. *Theodor W. Adorno*: *Essays on Music,* (Berkeley, University Of California Press: 2002), 391-433.
[81] Ibid., 391.

> It is not for music to stare in hopeless horror at society: it fulfils its social function more precisely when it presents social problems through its own material and according to its own formal laws – problems which music contains within itself in the innermost cells of its technique.[82]

This is precisely the case in *Malpopita.* Not only does the opera unmask the horrors of capitalism in its raw subject matter, but it displays consciousness within its very technique. For example the human voices which sing the sounds of the machine, the rigidity of the wages scene, the surrealist whirlwind of the Malpopita oil company worldwide domination, the awakening aesthetic of the music from the illusion of Malpopita at the end of the opera, all show the music's consciousness. In fact, the music displays more consciousness of the surroundings than any of the characters, as it predicts and emphasises the dangers before they come to pass.

Adorno believed that the task of music was to reflect social theory. He notes that 'The social interpretation of music, however, is not concerned with the individual consciousness of the authors, but rather with the function of their work.'[83] This was precisely the problem in Krenek's *Jonny spielt auf*, where the audience became infatuated with Jonny's jazz music and applauded his world domination at the end of the opera. *Malpopita* on the other hand presents greater hope regarding its reception, as it unmasks the concept of cultural escapism as a false concept constructed by capitalism. *Malpopita* presents to the audience, both textually and musically, the horrors of capitalist factory life, hoping to arouse within them the class consciousness which Adam displays.

Adorno also draws upon new technology such as radio and the phonograph record, emphasising their precision: 'The perfection of the machine and the replacement of human forces has become a matter of reality in music as well.'[84] Adorno was receptive to technology's ability to preserve music and communicate the will of the author more effectively than written notation. It was the problematic nature of musical reproduction by technology which is concerned with fulfilling the needs of popular culture. Goehr composed this work specifically for radio performance, so the radio is not intended for reproduction but production. It could be argued that in order to engage more people with opera, Goehr was utilising a new medium that was being appropriated by capitalist culture, thus expanding the probability of evoking a greater reaction to the themes

[82] Ibid., 392.
[83] Ibid., 404.
[84] Ibid., 414.

presented in the opera. For Adorno, art should penetrate the illusions of the working class and arouse within them a criticism of society, although during the Weimar Republic class consciousness was heavily distracted by the glitter of popular culture.

Another debate from critical theory present in *Malpopita* is the concept of the 'culture industry', recognised by Adorno and Horkheimer in *Dialectic of Enlightenment* (1944).[85] This widely recognised work offers a neo-Marxist technique which focused on art in modern society. They believed that art had become functional and was manufactured with its commercial value as its primary focus. Adorno and Horkheimer described the culture industry as undermining autonomous art, resulting in an exchange of cultural artefacts, which are fetishized, where consumers become trapped within the mode of production.[86] When referring to the culture industry they write: 'All mass culture under monopoly is identical and the contours of its skeleton, the conceptual armature fabricated by monopoly are beginning to stand out.'[87] This is clearly visible in *Malpopita.* Even though the oil company at the end of the opera is on the tropical island of Malpopita, it shares an identical musical aesthetic to the opening factory in industrial Germany, emphasising the cycle of manipulation. Thus, the opera is exposing the skeleton which, according to Adorno and Horkheimer, is shared by all monopolised mass culture.[88] It could even be asserted that the Malpopita oil company represents the culture industry, which Adorno and Horkheimer later theorised, as it presents a totalitarian threat to the democracy of the island, with dictatorship being a key characteristic of the culture industry. Adorno and Horkheimer stressed the media's ability to suggest escape from everyday life. In *Malpopita*, the radio creates a soundscape of a utopian island, communicating a tropical aesthetic with the music, but the dream is abruptly snatched away from the listeners by the oil sharks lurking in the water, exposing the illusion of escapism created by new media such as radio.

MALPOPITA, WEIMAR MUSICOLOGY AND RADIO THEORY

The second chapter of this thesis showed how the attitudes in musicology towards the radio changed as the medium and the Republic developed. This was reflected in the column *Musik und Technik*, a specialist column printed in *Anbruch* in 1929. The mere

[85] Theodor Adorno and Max Horkheimer, *Dialectic of Enlightenment Philosophical Fragments*, trans. Edward Jephcott, (California: University of California Press, 2002). (Originally Published in 1944).
[86] As summarised by David Held, *Introduction to Critical Theory: Horkheimer to Habermas*, (Berkeley: University of California Press, 1980), 91-92.
[87] Adorno and Horkheimer, *Dialectic of Enlightenment*, 95.
[88] Ibid., 99.

language change from ‘music on the radio’ to ‘radio music’ showed that critics began to envisage the idea of the radio as a producer of music, rather than a mere reproducer. Undoubtedly then, this radio opera therefore is a practical realisation of musicological output. As discussed in chapter two, the technical column in *Anbruch* consisted of articles written not just by musicologists, but scholars with technical knowledge of the new medium, and as shown by the analysis of *Malpopita,* it is clear that Goehr possessed the technical knowledge displayed in these articles.

In the first issue of *Musik und Technik*, Frank Warschauer puts forward some technical considerations for radio music.[89] This includes the considerations of the microphone. Warschauer argues that the full orchestra is unsuitable for radio and different instruments produce different tone colours when broadcasted. For example the woodwind instruments appear to sound the strongest, whereas trumpets should be muted in order to produce a clear sound. He also mentions that drums and percussion are particularly suitable for radio performance recognised by Goehr throughout *Malpopita.* Warschauer’s comments on the staging of *Hörspiel* are of particular significance to this discussion:

> Hörspiele: Die äußere Vorbedingung dazu besteht in der Berücksichtigung der absoluten Ausschaltung der Optik, so dass der Inhalt dem Zühoerer restlos aus dem gehoerten. Auf etwa vorzutragende Regiebemerkungen oder Situationserklärungen muss verzichtet werden. Personen koennen im Notfalle vorher angesagt, müssen aber ausserdem aus dem Gehörten ohneweiters zu erkennen sein. Geräusche sind nur im Notfalle zur Erklaerung oder fuer eine Pointe heranzuzeihen. Dagegen können plastische Reize durch distanzierte Aufstellung von Saengern, Sprechern oder Musikinstrumenten vor dem Mikrophon erreicht werden.
>
> Radio plays: The external prerequisite for this consists in the consideration of the absolute exclusion of optics, so that the content completely belongs to the listener. Any remarks or explanations of the situation must be omitted. Persons can be announced in case of emergency beforehand, but also have to be recognizable from their hearing. Noises are only to be used in case of an emergency or to explain or for a punch line. On the other hand, artificial stimuli can be achieved by distanced placement of singers, speakers or musical instruments in front of the microphone.[90]

These techniques of narration that Warschauer describes can be observed in *Malpoptia.* For example during the third scene, the road signs are narrated and are audibly different from the characters. There are no ‘noises’ in this opera which are not portrayed by the human voice or the music, except for the instance of Morse code, which indeed highlights

[89] Frank Warscahuer, ‘Rundfunk Umschau,’ *Anbruch,* (1929/1): 36-38.
[90] Ibid., 37.

the case of the emergency in which Adam and his crew find themselves. Goehr utilises the 'distance displacement' of musician, which as shown in this chapter can be identified by Goehr's use of score directions regarding the microphone.

Warschauer's stance on radio music (meaning music written for the radio) in 1929 indicates his unease about the use of the full orchestra in a radio broadcast.[91] This is clearly reflected in *Malpopita.* Even though only the piano vocal score survives, it is clear to the musicologist that the music is thinly scored and was orchestrated in this way by Hannan for the 2004 revival. One can also deduce from Goehr's caution in his approach to voice leading, dissonance and texture, which is also reflected in Warschauer's article. In addition, Max Butting's article discussing the composer and radio music reflects on the microphone and how it should be used by the composer and performer.[92] Butting argued that the composer must experiment with the microphone in order to understand how to use it effectively, as Goehr clearly shows in the score of *Malpopita.* His instructions regarding the microphone make it clear how the singers should conduct themselves around the device, as well as defining the spaces between each performer and the microphone, as indicated by directions such as 'am Mikro'. Goehr's experimentation with the microphone as written in the score clearly shows his vision of the audio space, such as foreground voices verses background noise and even the 'off stage' voice of Evelyne when Adam hears her for the first time. Additionally, Noack discusses the best positions for the microphone, which again can be seen in Goehr's instructions around the microphone, in order to construct a sense of sonic space. [93] Furthermore, Flesch's speech on the future of radio is also useful for this analysis.[94] He argues that listeners needed entertainment and relatable broadcasts, where the absence of the artist limited the work's impact. In *Malpopita,* Goehr attempts to eliminate the 'wet sponge' delivery but utilising the human voice in the performance delivery and using the invisibility of the performer to his advantage. The ambiguity of the opera mirroring Adam's dream sequence exploits the invisible nature of the performance, leaving the audience to dream alongside Adam of the tropical myth of Malpopita.

Regarding the position of the microphone and theory on radio drama, it is prudent to acknowledge the work of Arnheim in relation to *Malpopita.* Arnheim believed that the

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[91] Frank Warschauer, 'Rundfunkmusik,' *Anbruch,* (1929/2): 84-86.
[92] Max Butting, 'Der Komponist über Rundfunkmusik,' *Anbruch,* (1929/2), 86-87.
[93] Dr F. Noack, 'Die Technische Seite der Opernübertragung im Rundfunk,' *Anbruch,* (1930/6), 277-279
[94] Hans Flesch, 'Rundfunk im neuen Jahr: Vortrag, hehalten im Berliner Rundfunk am 1. Januar 1930 von intendent Dr. Hans Flesch,' *Anbruch,* (1930/6): 58-64.

wireless was a means of expression, and like his contemporaries, recognised the experimental nature of the medium. He noted that acoustic effects were more difficult to describe than the visual.[95] This was with reference to a radio drama script, where sound effects were described in words. Yet *Malpopita* is a musical score, which invites an alternative to the text. It is not just the music which is notated in this opera, but also the sound effects. This is due to Goehr's use of the human voice or percussion sounds to indicate sound effects rather than music. Thus, a clear description of these effects is noted in the form of music, showing once more Goehr's ingenious sound design. Arnheim acknowledged the role of musical sounds, noting the discovery of music within sound, yet radio should not widen the gap between music and natural unmusical sound.[96] His understanding of music as a noble art was reflected in his notes on spoken sound:

> Nevertheless, the success with which the concepts of musical theory can be applied to spoken – or sound – art has hitherto been neither recognised nor exploited to the slightest extent. Here the wireless could make great improvements.[97]

Perhaps Arnheim was unfamiliar with *Malpopita*, as the opera undoubtedly exploits musical theory in its sound drama. In fairness, Arnheim is discussing radio spoken drama rather than opera, but Goehr's use of music to create sound effects rather than objects is an exploitation of music theory within radio drama.

Arnheim also believed that sound drama should be based on a basic theme, an idea that can easily be realised through sound. He noted that the most effective implementation of representational sounds were sounds which betray their source 'in an unmistakable and expressive way, which are in fact, an acoustic image of the object to which they owe their existence.'[98] In other words, so called sound effects must be exaggerated and expressive in order to construct an image of the object. Goehr achieves this in *Malpopita* by his adaptation of the human voice in order to produce non-human sounds. His seemingly crude instructions of 'Motor, Traktor' and 'rrt-hep' are far removed from the sounds they portray, but they are also unmistakable in their representation, thus they are successful in producing acoustic images of machinery. Furthermore, Goehr highlights the musical

[95] Arnheim, *Radio,* 16.
[96] Ibid, 30-31.
[97] Ibid., 33.
[98] Ibid., 42.

dimension to Arnheim here in his attempts at representational sound, which are described through musical notation, in order to imitate the 'real' sounds of the factory.

It is also important to note the sound motifs which are evident in *Malpopita.* According to Arnheim, sound motifs are key to radio drama, and not just the action and the meaning of the words.[99] In *Malpopita*, different settings are clearly audible. The factory at the end of the opera is the exact acoustic of the one at the beginning. Music representing outside space is lighter than the clunky factory music. There are new sounds to indicate new situations, for example the use of Morse code, and the gong, clearly indicate to the listener the change of scene. Even though Goehr uses words to assist his sonic landscapes, the scenery is also heard in the sounds and composition of the music, once more showing music's ability to enhance the sonic projection of a sound drama.

Finally, Arnheim's theory of the microphone is also relevant here. In the score of *Malpopita* there are clear directions for the positon of the microphone. Arnheim, however, indicated that there was more to microphone theory than simply being far or near the object. Factors such as the orientation of the object and obstructions contributed to the position of the microphone. He noted that distances rather than direction could be heard.[100] All that is indicated in the score of *Malpopita* is the position of the singers in regards to the microphone, yet it was likely that the issues which Arnheim notes were dealt with in rehearsals and production by relevant experts, yet there are no sources to confirm this. Goehr does however implement what Arnheim refers to as an 'artistic curtain'.[101] This is where sounds appear to be fading in and out, just like the rise and fall of the theatre curtain. Goehr achieves this in the pub scene in Hamburg where the sung shanty is instructed to fade away. It is unclear whether this was achieved through the movement of singers or the microphone, however the effect is achieved. Goehr's simplification of his instructions for the microphone does not necessarily suggest that he wasn't aware of the factors which Arheim discusses, he just omitted the descriptions from the score and such things were dealt with in the studio.

CONCLUSION

Walter Goehr's radio opera *Malpopita* is an ingenious work of sound design, and a concrete example of a work of German experimental radio. Goehr's creative use of the

[99] Ibid., 45.
[100] Ibid., 64
[101] Ibid., 115

human voice shows his awareness of the medium and the limitations of early technology. The opera is thinly scored and the human voice is used for non-human sound effects. This chapter has presented the first academic analysis of the work, showing how the opera was written specifically for radio, underlying the ingenious composition and stage direction regarding the recording equipment. Goehr also appropriates an invisible voice *within* the invisible, where voices read out road signs, narrating the unseen. The themes of the opera are in tune with Brecht and Weill's *Mahagonny,* echoing the gloom of the depression, and emphasising human ability to ruin the ideology of a promised land. This work also embodies many aspects of critical theory. It aims to penetrate current class consciousness and unmasks the horrors of modern capitalism, whilst using a mass medium as a means of dissemination. The culture industry can be seen in the dominance of the 'Malpopita Oil Company', which stymies Adam's efforts at revolution. This opera mirrors the changing attitudes within Weimar musicology towards radio, reflecting the articles from *Musik und Technik,* the technical column from *Anbruch,* showing Goehr's awareness of constructing sonic space on an invisible stage. Finally, *Malpopita* serves as a realisation of Armheim's theories, as Goehr's composition attempts to solve issues of sound drama and exploits music in non-musical sound representation. Walter Goehr's *Malpopita,* therefore, does not only offer a valuable contribution to the narratives of Weimar opera and German experimental radio histories, but it also provides an insight into the development of critical theory as it serves as an operatic model to deliver a harsh critique of modern capitalism, by using radio as a compositional tool.

Conclusion

This thesis has explored the appropriation of radio in contemporary Weimar opera. The research adopted a case study approach in order to narrate the changing attitudes composers and critics had towards radio technology during the Weimar Republic, and more specifically it has looked at radio as a compositional tool within opera in terms of theory and practice. It focused on the intermedial relations of opera and radio, as well as the physical properties of the radio, and lack of visual aids regarding the so-called 'invisible voice'.

Chapter 1 revealed a lack of interdisciplinary research in Weimar opera studies, so the thesis aimed to combine methods from musicology and media history in order to contribute to historical narrative of opera and radio from Weimar Germany. Following on from the literature review, chapter 2 analysed the presence of radio in the music journal, *Musikblätter des Anbruch* (or as it later became known, *Anbruch*), where it became apparent that as the Republic and the technology developed, the attitudes of musicologist's towards radio changed. Radio was no longer an instrument to reproduce music, but had the ability to produce it. Contemporary German scholars noted the experimental stage of radio and highlighted its performance problems. This debate was reflected in the following three chapters, which showed three different operas, their use of radio, with the exception of *Maschinist Hopkins,* which employed broader media techniques. This thesis has discussed the appropriation of radio within opera from the Weimar Republic, from a prop, where radio was employed as a prop on the stage in *Zeitoper,* to producer, where radio was used to perform opera and the genre of radio opera was born. The final chapter showed how the appropriation of the radio changed in Weimar opera and how this reflects the attitudes of musicologists in order to firstly summarise the argument, and outline potential future research in fusing media history and musicology in investigating the appropriation of media techniques in musical performance.

EMERGING THEMES FROM THE CASE STUDIES

The analyses of the case studies showed recurring themes within Weimar opera, however their execution is different within each work. These themes are as follows: the treatment and representation of the machine, the construction of scenery and narrative in audio visual medium versus purely audio medium, the invisible voice, the struggle of isolation within modernity, freedom, and the relationship between theory and practice.

Firstly, the leftist ideologies present in *Maschinist Hopkins* can be seen in Walter Goehr's *Malpopita,* emphasised by the portrayal of factory life and the use of machines as producers, rather than reproducers. In *Jonny* the machine is a catalyst for the dramatic action and not a focal point of the drama. The illuminated loudspeaker should not be interpreted as a personification of the machine, as in Max Brand's *Machinist Hopkins* (1929), where the factory machines are personified and have their own voices. In *Malpopita,* the human voice is used to portray the machines rather than personify them, due to the limitations of the early technology. The visual representation of machines as fantasy creatures act as a comparison to how Goehr relies wholly on sound design to create factory images. In *Machinist Hopkins* humans are shown to be enslaved to technology and dominated by it, whereas the factory machines in *Malpopita,* are a metaphor for the machine of capitalism. Goehr's use of the singers in imitating the factory sounds appears to be more to do with the suitability of the voice to early radio technology than the personification of the machine. It does, however, suggest the dehumanisation of mankind in the age of mechanical reproduction. Brand gives the machine the majestic voice of an operatic diva, dominating the workforce and symbolising the merging man and machine in society. Goehr on the other hand, uses human voices to imitate the machine in order to show the totalitarian nature of capitalist factory life.

Additionally, the difference in treatment of the machine in these two operas also highlights the shift in artistic expression towards the end of the Weimar Republic, which was inevitably influenced by the great depression. The treatment of the machine in *Maschinist Hopkins* is more within the sphere of *Neue Sachlichkeit* and Expressionism, where the personified machines devour human bodies. *Malpopita,* on the other hand, was composed after the Wall Street Crash, and its pessimistic view of the machine is more in line with epic opera. This shift also reflects the changing attitudes to the machine within musicology, as shown in chapter 2, where the technical column of *Anbruch,* switched its focus from the manufacturer to the consumer. *Malpopita,* like Brecht and Weill's *Mahagonny,* turns its focus towards the working class, and with assistance of the radio, attempting to awaken their class consciousness on the threat of the machine to humankind.

The discussion of *Anbruch* in chapter 2 reflected the changing attitudes towards media technology, a shift from its reproductive, limited capabilities towards its future potential and its role in the production of music. The final scene of *Maschinist Hopkins* is a reflection of the changing attitude towards technology and media in the Weimar

academia. The machine appears liberated and is triumphant over the humans it dominates, looking to the future, where it will dominate the entertainment industry, devouring the doubting critics. The change in language from *Musik im Radio* to *Radiomusik* in *Anbruch* is also reflected in the case studies. In *Jonny,* existing music is played on the radio and the technology is used as a prop on the stage. *Malpopitia* on the other hand is an opera conceived for radio performance, where radio is no longer a prop on the stage, but a producer of opera; it has become the stage.

Furthermore, the three operas studied in this thesis use different techniques of mediation in order to present their narratives. *Jonny* and *Maschinist Hopkins* are works of audio visual media, whereas Goehr's *Malpopita* is purely audio. Goehr musically constructs audio imagery of machines for its radio audience, whereas *Maschinist Hopkins* uses cinematic techniques, where film projections were used in order to make the machines seem alive and Brand employed the concept of the 'invisible voice' in order to personify them. *Maschinist Hopkins* serves as an excellent comparision to *Malpopita* in contrasting the treatment of a factory setting on stage and on the radio. Unlike *Maschinist Hopkins,* Goehr's machines are not fantasy beings, they are mundane and monotonous, yet both are represented musically by the human voice. Due to the nature of early radio however, the machines in *Malpopita* are sent to the background in order to create a sense of sonic space. This shows that Weimar radio was experimental with is use of space in order to communicate a sense of depth to the listener. It is clear in early debates on radio and music theory, as presented in *Anbruch* and the work of Adorno and Arnheim, that the microphone and its position toward the speaker/singer was significant in conveying a sense of space. This is reflected in Goehr's instructions in the score which highlight the distance of the microphone to a specific musical line. This highlights a clear relationship between theory and practice, suggesting active debates between disciplines, which was highlighted in chapter 2 in the analysis of *Anbruch* with its wide range of contributors from both musicology and media backgrounds.

The treatment of the 'invisible voice' has also varied in the case studies. In Krenek's *Jonny,* the invisible voice was treated as a metaphysical object, shown by the ghostly aesthetic of the hotel terrace and the lighting around the loudspeaker. The invisible voice in *Jonny* was dead. It was not integral to the opera's themes, and as Krenek

stated, it served to solve dramaturgical complications.[102] The invisible voice of Anita does however, succeed in awakening Max by highlighting his longing for her and the distance between them, yet its effect is limited due to the gimmick of the loudspeaker, which is highlighted by the ghostly aesthetic of the terrace and the cartoon like hotel guests. Brand's use of the invisible voice moves beyond the use of props, as they become integral to the opera's message. The machines are assigned their own characters and are essential to dramatic action. Both Anita and Evelyne's voices are presented as 'invisible'. The radio is used to perform this in both *Jonny* and *Malpopita*, yet its function is different in both operas. In *Jonny*, the radio is on the stage, acting as a dramaturgical mediator, carrying Anita's voice to Max. The radio in *Malpopita*, however, delivers the voices to the audience, yet still achieves the same effect of the female voice being heard by her lover, out of sight from each other. Both Max and Adam are attracted to an 'invisible' female voice and the music which mediates from it. Goehr's use of the 'invisible voice' is an extension of Brand's application, as in *Malpopita* there are two levels of invisibility: The first being the invisible voices of the machines that are similar to *Maschinist Hopkins,* as these voices are invisible to the characters and audience, and secondly all voices are invisible to the audience due to the nature of radio opera. Therefore Goehr's unseen voices (those that read the road signs and the voices of the machines) are invisible *within* the invisible.

Another recurring theme within the case studies is the notion of the struggles and isolation within modernity. As well as *Maschinist Hopkins,* the themes and music of *Malpopita* are comparable to those of *Jonny spielt auf. Malpopita* revolves around the conflict between Adam and oil, whereas *Jonny* compares the antitheses of Max and Jonny. Both protagonists struggle to come to terms with the modern world and long for the isolation of nature. For Adam it is the warm island of Malpopita and for Max the icy glacier. Although complete opposites Malpopita and the glacier represent similar ideals which do not belong in modern society. Max longs to be with the glacier as that is where he feels at peace, it is his Malpopita, and it forces him to come to terms with the modern world and tries to adapt himself to it. The glacier, like Malpopita, has its own music, its own distinct aesthetic which is distinctive from metropolitan world. These two environments represent human desire to reconnect with nature and escape from the smog

[102] When referring to the 'invisible voice' in Krenek's *Jonny,* this means the voices associated with the loudspeaker and not the invisible voice of the glacier, a natural object far removed from the machine and media objects on stage.

of modern life. The difference in these operas however, is that Max already lives in the mountains he adores, but is forced to leave and integrated into modern society. Adam on the other hand, leaves working life in search of *Malpopita,* which becomes spoilt, and he is forced to live in this dirty version of his promised land. Max does not spoil the glacier, but turns his back on it, where Adam is helpless to stop the destruction of the land he has worked so hard to reach.

Freedom too is a theme which runs through the veins of both of these works. Like Max in Krenek's *Jonny,* Adam struggles to find his identity as he desires to stand out from the masses and reject conformity. Max longs to be free in his art and be recognised for his genius, which seems to have lost its worth in a world fascinated by popular culture. Adam too longs to be free from capitalism, yet the harsh reality of the opera shows that this dream is unrealistic. Yet it is not just individual freedom which these operas have in common, but performance freedom. Both works attempt to break free of the constraints of a stage performance with the use of radio technology, by understanding radio's ability to communicate and perform music. In *Jonny* the radio is used as a dramaturgical mediator for long distance communication between lovers, as well as to perform an opera aria. In *Malpopita,* radio is not a prop on the stage, but becomes the stage. It is used to perform the entire work and to communicate political ideology. Both works experiment with radio as a device to move beyond traditional operatic performance and audience engagement. The brief absence of music to convey freedom, and the solitude of man on the island, is indeed a contrast to *Jonny spielt auf.* In Jonny, the radio was used to communicate music to Max to remind him of his isolation, and music, especially pitch, was where Max found his identity. The complexity of pitch construction is central to the concept of art and is reflected in *Als ich damals.* In *Malpopita* it is the absence of music, in terms of notes, which creates the sense of freedom. Rhythm becomes more important, ironically conveying the concept of *Bewegung,* which Adam is trying so hard to escape from.

Finally, the analysis of *Anbruch* showed the changing attitudes towards radio within Weimar musicology. Nostalgia and romanticism played a huge part in the journal. For example the journal would print extracts of sheet music for readers to perform at home, as well as reminiscing on the great composers of the Nineteenth and early Twentieth centuries. Schoen's article about opera on the radio highlights radio's ability to disseminate opera in the home and reflects upon nostalgia and the ‘charm’ of broadcasting

opera.[103] This is epitomised by the radio scene in *Jonny*, where hotel guests are mesmerised by the radio broadcast. They are not focused on the content of the aria which is being broadcast however, but engrossed in the *experience* of radio. The *Malpopita Lied* resembles romanticism within modernist composition. Its connection with nature and nostalgic feel put it more in line with 19th Century lied, in a similar way to *Als ich damals.* This concept of escaping to nature is one of the core themes of this aria. The *Malpopita Lied*, then, like *Als ich damals*, draws heavily upon the themes of romanticism, and incorporates modernist techniques, such as the twelve tone technique and unconventional voice leading.

OBSERVATIONS OF ENTANGLEMENTS

This thesis has focused on the relationship between opera and radio in the Weimar era. By doing so it has observed significant entanglements between the two media and also the wider culture in the period. Various entanglements have emerged from the analysis of the case studies regarding relationships between opera and radio. Firstly, scene 7 of *Jonny* portrays transmedial flows.[104] In this opera Krenek uses the radio as prop and simulates a broadcast, showing a breakdown in borders between radio and opera. This is similar to Kurt Weill's *Der Zar lässt sich Photographiern* (1927), where a tango was played from a gramophone, of which Rehding described as a 'wormhole' in operatic history.[105] Viewing the use of technology and media within Weimar *Zeitoper* as transmedial flows rather than imitation, means that the radio scene from *Jonny* contributes to debates within media history as well as musicology, as it shows *Zeitoper* as an artefact of both music and media history. Even though the radio scene in *Jonny* is presented as a simulation, its analysis has shown that it presents complex relationships between opera and radio, both within the scene's performance and narrative. This opera is a significant example of *Zeitoper's* complex relationship with new media of the Republic. Not only does it show how the new media assisted in the redesign of traditional medium of opera, but highlights Krenek's consciousness of the modern world. It shows how modernist composers struggled to adapt to the demands of mass culture, as well as representing the technology and the audience it served. In traditional opera the human voice acts as a primary mediator, and even though Krenek entangles it with modern media, this does not

[103] Ernst Schoen, 'Oper im Rundfunk,' *Anbruch,* (1931/5): 110-11.
[104] Cronqvist and Hilgert, 'Entangled Media Histories,' 132-133.
[105] Rehding, 'On the Record,' *Cambridge Opera Journal*, vol. 18, no. 1, (March 2006): 59-82, 81, JSTOR.

change in *Jonny spielt auf*. The music the loudspeaker mediates is key to on and offstage debates, yet the hotel guests' behaviour provides a reflection of contemporary radio discourses. Goehr's *Malpopita* also explores transmedia flows. This work is a *Funkoper*, where the old medium of opera becomes fused with the new medium of radio. Yet radio is not used as a prop or a simulation, the radio technology integrated into the performance of the opera. The compositional techniques are adapted to comply with the limitations of the radio technology and to compensate for the lack of visual output, thus blurring the boundaries between the two media.

Secondly, this thesis has explored transborder and transnational relationships have within the case studies. Firstly, the influence of jazz is present in *Anbruch* and the operas. *Jonny* in particular shows the impact of jazz on Weimar music and portrays a caricature of an African American jazz musician. Jonny's interruption of Anita's aria with his jazz music not only reflects the presence of jazz music in Weimar radio, but mirrors the audience reaction to jazz as opposed to 'serious' music. Jazz is also present in *Maschinist Hopkins* and *Malpopita,* where the jazz music is integrated into the musical montage. Furthermore, the journal *Anbruch* was an Austrian journal with contributors who were active in the Weimar Republic. The ideas expressed in the journal about new radio technology were echoed in operatic output. This is especially apparent in *Malpopita,* as the opera was written specifically for radio. The journal expressed the need of music for the radio rather than simply reproducing existing music on the radio. Thus, *Anbruch* does not only represent transborder entanglements, but also entanglements between theory and practice, where opera during the Weimar Republic reflects musicology, as composers not only wrote music, but published in theoretical journals such as *Anbruch.*

To elaborate more on the entanglements between theory and practice, there appears to be some entanglements emerging between people and industries. The analysis of *Anbruch* showed that Hans Flesch, a prominent figure in the radio industry, worked with composers such as Hindemith, Weill and Schoenberg, as well as critics such as Adorno and Benjamin. These cross-industry relations further highlight the experimental nature of Weimar music and radio as each industry sought advice from and collaborated with the other. Furthermore, many of the contributors from *Anbruch* as well as Krenek and Adorno, studied under Franz Schreker, an Austrian composer, at the Berlin *Höchschule für Musik,* where Hindemith worked in the radio department. Schreker's influence on Krenek can be seen in *Jonny*, where Krenek's treatment of the distant voice of Anita is comparable to Schreker's in his opera *Der ferne Klang.* As well as professional

relationships, friendships been composers and critics have also been highlighted in this thesis, such as the friendships of Schoenberg and Busoni, and Warschauer and Brecht. However there have also been rivalries between personnel. The most prominent example being the feud between Krenek and Schoenberg, as discussed in chapter three. This shows another depth of entanglement as these individuals were not simply voices their critiques in journals such as *Anbruch*, but were using their operas to communicate them, thus strengthening the argument of opera as a medium and adding another layer to its multimediated dimensions.

Another aspect of entanglement which has been prominent in the thesis is that of trans-media. This has been clear in the overlaps between opera and radio, but also between opera and film. The first case study discussed the use of radio as a prop on the stage, a simulation of a radio broadcast and audience behaviour. Even though radio technology was not used to produce the sound in Krenek's *Jonny,* the materiality of the loudspeaker was emphasised by the lighting and set design. The dramaturgical use of radio in this opera is an example of how *Zeitoper* became entangled with media of the Weimar Republic, as they not only portrayed the media objects, but highlighted their materiality with traditional operatic techniques as well as simulating their experience. Other examples of media entanglement with *Zeitoper* include the portrayal of the press in Hindemith's *Neues vom Tage,* the use of a gramophone record in Weill's *Der Zar,* and the imitation of a cinematic reel in Hindemith's *Hin und Zurück.* In Brand's *Maschinist Hopkins,* it is not the materiality of media which is highlighted, but the personification of the machine. The machines are given life and appear to be producing their own sounds. It is the opera's resemblance to a film script which makes this work push the boundaries of opera. Not only is it entangled with cinematic techniques, but also techniques of radio, as Brand experiments with the invisible voice, which in turn provides a prelude to *Funkoper*. Goehr's *Malpopita* is an opera fully conceived for radio, resulting in the fusion of opera and radio. The radio becomes a stage and vice versa. *Malpopita* is a transmedia product, rather than *Zeitoper* which portrayed relationships of transmedia as part of its wider entanglement with modernity.

MUSIC IN THE THIRD REICH AND EXILE

Before concluding the thesis it is important to note the state of music after the fall of the Weimar Republic. When the National Socialists gained control in 1933, they attempted to further enact their cultural policy: the preservation of German racial purity and

upholding reactionary attitudes against modern music.[106] The war against modernism and anti-Semitism was present before the rise of National Socialism, as shown by the disappearance of the Baden-Baden festival after 1930 and the abolition of the Kroll opera in 1931. Furthermore, works such as Krenek's *Jonny* and Weil's *Der Dreigroschenoper*, saw a decline in popularity and in 1932-1933, there was a clear tendency towards conservative opera programming.[107] Scholars in musicology have written extensively on music in the Third Reich, thus this section will summarise the life and music of the composers in exile which were studied in this thesis, as their experiences after the Republic highlight the uniqueness of their work during the Weimar era.[108]

Eventually, the Nazi regime forced many musicians into exile. In 1938 the Nazi party held an exhibition in Dusseldorf called *Entartete Musik* (degenerate music). Figures such as Felix Mendelssohn, Arnold Schoenberg, Gustav Mahler and Kurt Weill featured as well as a range of other Jewish composers. Works of modernist composers such as Paul Hindemith, Alban Berg and Anton Webern also featured. The poster for the exhibition portrayed a saxophonist in the form of a black monkey, with the Star of David on his jacket, a clear reference to *Jonny Spielt auf*. Krenek was of Jewish origin and his music comprised of both jazz and modernist techniques. Furthermore, Jonny's character of an African American was also considered degenerate in its representation of the 'other'. In the early 1930s, Krenek composed his opera *Charles V* which was due to premiere at the Vienna State Opera under the direction of Clemens Krauss, yet the theatre decided to pull out of the performance. This was due to the opera's political content regarding Austrian history.[109] Krenek's expulsion due to the Anschluss, prompted his move to America in 1938. He continued his modernist techniques in composition in the

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[106] Erik Levi, *Music in the Third Reich,* (London; MacMillan 1994), 82.
[107] Ibid., 83
[108] For scholarship of music in the Third Reich see: Reingold Brinkmann and Cristoph Wolf ed., *Driven into Exile: The Musical Migration from Nazi Germany to the United States,* (Berkeley: University of California Press: 1999); Dorothy Lamb Crawford, *A Windfall of Musicians: Hitler's Émigrés and Exiles in Southern California,* (Yale: Yale University Press, 2009); Michael H. Kater, *Composers of the Nazi Era: Eight Portraits,* (Oxford: Oxford University Press, 2000); Michael H. Kater, *The Twisted Muse: Musicians and their Music in the Third Reich,* (Oxford: Oxford University Press 1997); Michael H. Kater, *Different Drummers: Jazz in the Culture of Nazi Germany,* (Oxford: Oxford University Press, 1992); Michael Haas, *Forbidden Music: Jewish Composers Banned by the Nazis,* (Yale: Yale University Press: 2013); Erik Levi, *Music in the Third Reich.* (New York: St Martin's Press, 1994); Chris Walton and Antonio Baldassarre ed. *Musik im Exil: Die Schweiz und das Ausland,* (Berlin: Peter Lang AG, 2005); Nemtsov, Jascha, and Beate Schröder-Nauenburg. 'Musik Im Inferno Des Nazi-Terrors: Jüdische Komponisten Im 'Dritten Reich'.' *Acta Musicologica* 70, no. 1 (1998): 22-44. JSTOR
[109] 'Ernst Krenek: About the Music', *Universal Edition,* http://www.universaledition.com/Ernst-Krenek/composers-and-works/composer/395/aboutmusic, (Accessed 12/09/14)

USA, he taught at universities and gained American citizenship in 1945. During the 1950s and 1960s Krenek experimented with serial and electronic composition.

Paul Hindemith was also forced into exile. The composer openly opposed fascism, proclaiming his views in his classes at *Berliner Hochschule für Musik*, which he continued after January 1933.[110] He tried to live under the Nazi regime for as long as he could, yet his place in society remained uncertain. A turning point was his 1938 opera *Mathis der Mahler*. His earlier 1934 symphony was banned due to Hindemith's alleged insult of Hitler during its premiere.[111] Hindemith fought to have *Mathis* performed in Germany but to no avail. The work premiered in Zurich in 1938. Hindemith moved to the United States in 1940 and became an American citizen in 1946. However, Hindemith was a prominent composer under the early Nazi regime and was secretly loved by several members of the Third Reich.[112] John Allison's refers to Hindemith as the 'Nazi-defying composer who has been unfairly forgotten.'[113]

In 1931, Kurt Weill was working with Brecht on the opera *Die Bürgschaft*. In the autumn the Stuttgart stage refused to perform it because of fear of political difficulties a performance could bring.[114] When the opera premiered at the Berlin *Städtische Oper* in 1932, it was attacked by Nazi critics, after which Weill became anxious about the future of theatre in Germany under the Nazi rule.[115] In 1933 it became known to Weill that he and his wife Lotte Lenya were on the Nazi blacklist. The pair crossed the border into France on March 22 and Weill worked in Paris. He was familiar in French society and his colleague Schoenberg arrived in France that May.[116] Unlike Hindemith and Krenek, Weill was keen to move to America. Weill and Lenya arrived in New York in September 1935.

In the early 1930s, Max Brand was working in ballet and opera at the *Raimundtheater*, Vienna. In 1938 he fled to Brazil and worked with Heitor Villa-Lobos. In 1940 he moved to America, where he lived and worked until 1975, when he returned to Austria. Between 1965 and 1968, Brand worked with Robert Moog on the development

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[110] Michael H. Kater, *Composers of the Nazi Era*, (Oxford 2000), p.34.
[111]Howard Posner, *Symphony: Mathis Der Maler*, http://www.laphil.com/philpedia/music/symphony-mathis-der-maler-paul-hindemith, (Accessed 10/09/14)
[112] Ibid, 49.
[113]John Allison, 'Paul Hindemith: The 20th Century's Most Neglected Composer' (04/12/13), http://www.telegraph.co.uk/culture/music/classicalmusic/10484549/Paul-Hindemith-The-20th-centurys-most-neglected-composer.html (Accesed 10/09/19)
[114] Kater, *Composers of the Nazi Era*, 59.
[115] Ibid.
[116] Ibid, 62.

of the Moogtonium. Brand commissioned the project as he wanted his own version of the Mixter-Trautonium.[117] Brand's interest in electronic music in later life is surely echoed in his early writing and composition. His fascination of the machine as a producer of music, an instrument in its own right, can be seen in *Maschinist Hopkins*, where his personification of the machines gave them a voice, showing the potential for a new age of mechanical and media opera.

Unlike many of his contemporaries, Walter Goehr chose Britain as his emigration destination in 1933. Between 1933 and 1939, Goehr was conductor and musical director of Columbia Records. In 1942, Goehr began his work for the BBC, where he worked as a composer and conductor until he died after conducting a performance of Handel's *Messiah* in December 1960.[118] Goehr's legacy lives on in the music of his son, Alexander Goehr, who continued to live and work in the UK after the death of his father, and also in the musicology of Lydia Goehr, whose research on Weimar opera has been cited in this thesis.

IMPACT AND FUTURE RESEARCH

This thesis has presented an interdisciplinary study of the changing role of radio within Weimar opera. It has offered new perspectives on existing scholarship, regarding the chapters on Krenek's *Jonny spielt auf* and Brand's *Maschinist Hopkins*, and new analysis of Goehr's *Malpopita,* a work previously not discussed in academia. This research has combined the disciplines of musicology and media history and thus contributed to the narratives of Weimar opera *and* experimental radio. It has shown how composers during the Weimar Republic both theorised and appropriated radio, firstly as a prop within or reproducer of opera, to radio's potential to produce it, therefore showing the potential of radio as a compositional tool. The idea of radio as a compositional tool is essential when merging the disciplines of musicology and media history, especially with regards to opera. As the historiography in this thesis has shown, experimental radio compositions have been studied (such as Brecht and Weill's, *Der Lindberghflug* and Ezra Pound's radio

[117] For more on Brand's work on the Moogtonium, see Aigner, Thomas, Thomas Brezinka, Peter Donhauser, Christian Scheib, Helmuth Schwarzjirg, and Sylvia Mattl-Wurm. *Maschinen Für Die Oper: Der Komponist Max Brand. Visionen, Brüche Und Die Realität*. Edited by Schimana Elisabeth. (Wien: Hollitzer Verlag, 2016).

[118] For more on Goehr's life in Britain see: Lydia Goehr, 'Music and Musicians in Exile: The Romantic Legacy of the double Life,' in Reinhold Brinkmann & Christoph Wolff ed., *Driven into Paradise: The Musical Migration from Nazi Germany to the United States,* (Berkeley: University of California Press: 1999), 66-91.

operas), but there needs to be more of an emphasis on radio as a compositional tool within experimental radio studies, whether the radio set is a prop, or the stage of opera, the composers and understanding of the medium, their reasoning behind choosing to utilise it, and the changes they make within the composition are all vital in understanding the fusion, not just of opera and radio, but opera and cinema, or opera and television. Furthermore, placing opera within the context of media history enriches its analysis as it enables the musicologist to understand the relationships between opera and other media, rather than dismissing media objects as just props on stage.

This thesis has been informed by the notion of Entangled Histories. As outlined in the introduction, Entangled Media Histories is primarily concerned with transborder/transnational relations, transmedia flows and materiality within media history.[119] By adopting the view that opera is a complex multimedia art form, as argued by Hutcheon and Kramer, this thesis has shown how opera and radio became entangled during the Weimar Republic.[120] Not only shown entanglements between opera and radio during the Weimar Republic, but between opera, radio *and* Weimar musicology.

Additionally this research lays the ground work for Walter Goehr's career in Germany, which at present there is limited scholarship. This research has shown that Goehr pushed the boundaries of opera performance further than his contemporaries. This opens up questions for further research on Goehr's work in Weimar Germany before he left for Britain during the Second World War. In 1932 Walter Goehr moved to London and began his post at the Columbia record company. He later collaborated with the BBC, with whom he continued to have a professional relationship until he died in 1960. Goehr's obituary in *The Musical Times* celebrates his life in Britain, yet neglects his early career in Germany.[121] Lydia Goehr outlines his life in Germany, including his work in the Berlin Broadcasting service, his collaboration with Carl Sternheim, and his work with Piscator.[122] As established in the previous chapter, in his scholarship on German experimental radio, Daniel Gilfillan has written on Goehr's collaboration with Friedrich Wolf on the radio play *S.O.S…rao, rao…Foyn* in 1928, yet he ignores Goehr's radio opera

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[119] As shown by Cronqvist and Hilgelt 'Entangled Media Histories,' *Media History*, 23:1, (January 2017), 130-141.

[120] See: Linda Hutcheon, 'Interdisciplinary Opera Studies,' *International Review of the Aesthetics and Sociology of Music*, vol.121, no.3, (May 2006): 802-810, 802, JSTOR and Lawrence Kramer, *Opera and Modern Culture: Wagner and Strauss*, (Berkeley: University of California Press, 2004), 26.

[121] The author if the obituary is unknown, 'Walter Goehr,' *The Musical Times*, 102, no. 1415 (1961), 39.

[122] Lydia Goehr, 'Indefatigably in Quest of Something New: The life and work of Walter Goehr,' in Jim Wang (Director) and Stefan Lang (Producer), *Malpopita: Funkoper (1931)*, [Audio CD], (Caprico 2005), 11-13.

Malpopita, which this thesis has argued is a key work of experimental radio.[123] Further research could focus on Walter Goehr's activity in Germany, including his musical works, his studies with Ernst Krenek and Arnold Schoenberg, his collaborations with figures such as Döblin, and his relationships with institutions (such as the Berlin broadcasting service and UFA).Thus, scholarship on Goehr's musical career in Germany is necessary for music and media history, both in building a biography of Goehr and to strengthen existing research on German experimental radio.

In conclusion, this thesis presents a contribution to musicology *and* media history, offering new perspectives and providing new material for the narrative of opera and experimental radio during the Weimar Republic. This thesis has discussed theoretical and practical output regarding radio and opera. It has showed that musicologists displayed changing attitudes to radio, which are reflected in radio as an onstage prop during the mid-20s, as composers and critics approached the new medium with caution. By the end of the Republic radio was used to produce opera, it became a stage and exhibited opera as a purely audio medium. The thesis explored current themes within 'Entangled Media Histories' by discussing the complex relationships between opera, radio and Weimar musicology. Finally this thesis has shown that composers from the Weimar Republic utilised radio as a compositional tool within opera, whether as a dramaturgical solution or the vehicle for performance, this period saw the fusion of opera and radio, presenting new ways of experimentation, transforming the traditional stage, where the so-called 'invisible voice' appear to be pivotal in merging opera and radio, and is key to understanding the narrative of radio's journey from prop to producer during the Weimar Republic.

[123] Daniel Gilfillan, *Pieces of Sound,* (Minnesota 2009).

Appendix:

Synopses of Opera Plots

ERNST KRENEK: *JONNY SPIELT AUF*

Act 1

Max and Anita meet on the mountain. Anita is scared and has lost her way so Max comforts her and attempts to make the glacier appealing to her. She convinces him to leave the mountains with her. The two then become lovers and begin living together. Anita has to leave as she is staring in one Max's opera in a faraway city (Paris). Max is jealous and they rehearse the aria *Als ich damals* from one of Max's operas. They are interrupted by Anita's manager urging her that it is time to leave. Max begs Anita to renounce fame and stay with him. Anita declines, and leaves for the city with her banjo.

When she arrives in Paris, Anita stays in a modern hotel, the very same hotel that the famous violinist Daniello is staying and giving a concert. Yvonne, the chamber maid is attending to Daniello's room. She is interrupted by Jonny, the famous Negro singer, and they exchange embraces. Daniello returns from his concert followed by a troop of admirers, leaving his Armati violin in his room. Anita also returns from her performance, longing to be with her lover, and decides to leave the next day. She makes her way to the hotel restaurant for a meal and runs into Jonny, who has been admiring her from afar. He crudely suggests that she spends the night with him, but she is rescued by Daniello, who chases Jonny away, but pays him as compensation. He then accompanies Anita to the restaurant. Yvonne confronts Jonny about his infidelity and they mutually decide to separate. Daniello manages to charm Anita and he spends the night in her hotel room. Jonny hears the pair go into Anita's room and seizes his opportunity. He sneaks into Daniello's room, takes the Armati violin out of its case and hides it in Anita's banjo case that is hanging on her door, planning to follow her home and steal it out of her house.

The following morning, the hotel is in chaos. Yvonne is upset about her breakup with Jonny and argues with the hotel manager. Anita gets ready to leave and bids Daniello farewell. He protests and aims to convince her to stay by playing for her on his violin, which he finds to be stolen. He is understandably enraged, and accuses the hotel. Yvonne is dismissed, but Anita takes pity on her and hires her as her personal maid. Meanwhile, Daniello plots his revenge. He gives the ring that Anita gives him to remember her by to

Yvonne. He tells her to give it to Anita's beloved with his greetings. Jonny enters the scene and tells the manager that he resigns as the hotel jazz singer and leaves, followed by Anita and her manager.

Act 2

Max prepares for Anita's arrival, counting the minutes, but Anita arrives home late. She answers all of Max's questions and withdraws from his company. Yvonne comes in with the luggage and gives Max the ring. Max works out what has happened storms out. Jonny, who has followed Anita home, comes in through the window, spots the violin in the banjo case on the piano, and takes it. Anita comes back and learns from Yvonne that Max has left and recognises the ring she gave to Daniello and realises what must have happened.

Max, distraught by Anita's night with Daniello, withdraws to the mountains, He wants to throw himself onto the mountain, but the voice of the glacier rejects him. Suddenly Anita's voice is carried to him by the loudspeaker from a nearby hotel. She is singing the aria that she sang with him earlier in the opera. This brings Max back to life and overcome with emotion, he runs off to find his beloved. The end of Anita's performance is brought to an abrupt end by the announcement of Jonny and his jazz band. The previously hypnotised guests begin to dance along to the jazz music. Daniello enters and recognises the sound of his violin and he now knows who the culprit is.

Jonny, who is now being chased by Daniello and the police, is on his way to the train station. Meanwhile Max reconciles with Anita and decides to accompany her on her American tour. At the train station Jonny hides the violin in Max's luggage, it is discovered and Max is arrested. Daniello, still desperate to win Anita back, tries to convince her than Max is guilty. Anita begs Yvonne to come forward as a witness to Max's innocence, but Daniello tries to stop her. The two struggle and Yvonne pushes him off the platform and Daniello is killed by an oncoming train.

Yvonne finds Jonny and begs him to help in getting Max released. Jonny knock's out a policeman and dresses in his clothes. The police appear to take Max to jail, but Jonny, now disguised, is driving the police car, turns back to the train station. Max arrives at the platform just in time for his train, where Yvonne, Anita and her manager are waiting for him. Jonny climbs the station clock with Daniello's violin, which turns into a projection of the world. Jonny stands triumphant on top, playing his violin as the crowds cheer and dance along to his music.

MAX BRAND: *MASCHINIST HOPKINS*

Prologue

In a working class bar, a group of workers are discussing their factory foreman, Jim. Bill leaves the group in order to visit his mistress, who happens to be Nell, Jim's wife. She gives him a key to the factory safe, where he will find the secrets to Bill's success. They go to the factory, but Jim is there, observing the work of the machines. Jim notices them and during a fight between Jim and Bill, Jim is pushed under the machinery and crushed to death. Bill and Nell flee.

Act 1

Years later, Bill and Nell are married and have become rich from the secrets they stole from the safe. This is not enough for Bill. He wants to own the factory and close it down. A machinist called Hopkins, becomes aware of Bill's plan, realising that it will leave a mass of workers without income, so he is sacked by Bill. After a brief encounter with Hopkins, Nell becomes attractive to him. Meanwhile, Bill helps her pursue her showbiz dreams. At the end of the act Nell signs a theatre contract. The act ends in a jazz café where Bill and Nell celebrate their success, which will be thwarted during the next act.

Act 2

Bill is now the director of the factory. Rumours spread around the factory as some of the workers recognise Bill from the night of Jim's murder. Hopkins vows to kill Bill in order to save the factory and its workers. He appears in Nell's dressing room and forces her into confessing to stealing the secrets from the safe, which lead to Jim's murder. He is successful in persuading her to help him expose Bill and his crimes.

Act 3

This act takes place sometime after the second. Bill is disguised as an anonymous worker whilst Nell is completely in love with Hopkins, who rejects her after he has got all the information he needs from her. Due to her failing showbiz career, Nell becomes a prostitute. Bill hears of this when he is in a bar, and enraged, he sets out in pursuit of his ex-lover. He finds Nell in her apartment with a client, and overcome with anger, her kills

her. Bill, now desperate, returns to the factory in an attempt to blow it up, but he is hindered by Hopkins, who throws him under the machinery, and Bill dies in the same way as Jim. During this scene the machines sing with the voice of Nell. As these events unfold, the workers continue as if nothing has happened.

WALTER GOEHR: *MALPOPITA*

The opera begins in an oil factory. Workers sing of the continuous process of labour, dreaming of the distant island of Malpopita. Then the factory foreman call out the workers for their wages. They are told of all their reductions in detail, so after things like health insurance, they are paid a pittance. One worker, Adam Schikedanz, has had enough and asks for his papers. Adam leaves the factory and makes his way across Germany to Hamburg. Whilst in a pub in Hamburg, Adam is hired as a deckhand by Piet Hein, and joins the crew on their voyage on the ship Esperanza.

Whilst on the ship Adam meets the captain's daughter, Evelyne, and the pair fall in love. The crew sing of the tropical island of Malpopita as they sail the ocean and work on the ship. Richard, the steersman, is jealous of Adam and the pair fight over Evelyne. The captain breaks it up and restores order. Suddenly, the crew spot a government steamer and Adam learns that he is on board a smugglers' ship that is being pursued. Adam urges Evelyne to break free from her father, but she refuses. The Esperanza escapes the government vessel, but during the celebration the ship crashes into a reef.

The Esperanza is shipwrecked on the island of Malpopita. Whilst Adam is in paradise the rest of the crew are bored and hope to be rescued soon. Adam is sent off with to other crew members in order to investigate the island. The rest of the crew build a shelter and Richard attempts to woo Evelyne, but she tells him she prefers Adam. Enraged, Richard goes after Adam. Meanwhile, Adam and his comrades are exploring the island, when suddenly voices in the distance shout that they have found oil. All except Adam are excited as they know that this will make them rich. Adam attempts to warn them of the dangers, but no one is interested. Even Evelyne becomes seduced by the oil and the two part company. Even Richard is distracted from killing Adam. The crew form the Malpopita oil company. New factories are built and franchises placed all over the world. The opera ends as it began; factory workers are paid a pittance and Adam's name

is called out by the foreman. His dream is cruelly snatched from him and he is reminded that he will be working in a factory forever.

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