

Part III: Ideas in Practice – *Pierrot lunaire*, Op. 21

Chapter 6: the broadcast and commercial recording

Robert Philip, in his book *Performing Music in the Age of Recording*, speaks about the huge importance of the recording studio in defining how the music will sound in the recording.¹ He claims that listeners and most musicologists are not aware of its extent and significance. Eric Clarke wrote that 'there is a deep-seated uncertainty about how recordings should be understood – whether as captured performances or as studio creations'.² In popular music, it is widely acknowledged that live performances may differ greatly in relation to studio recordings. In Western art music too, the differences may be significant.³ John Ardoin, for example, writes that 'Furtwängler was a conductor who relied on the inspiration of the moment during live concerts, and his more carefully prepared studio recordings often lack the spontaneity of the recordings of his live performances'.⁴ Stephan Davis stresses that 'Studio performances display different strengths and weaknesses from sound-alike performances, and the two should be assessed and appreciated differently'.⁵ Michael Chanan, writing about the early history of recordings and radio, claims that 'Radio operates in the present tense, records reproduce the past moment. Radio is ephemeral, records preserve the evanescent. For the recording engineer, the record is not a live medium but precisely a record, which reproduces an original sound. For the broadcaster, the sound at source, has no independent integrity and everything is malleable... Here, then, for the first time, there emerges a controversy about

¹ Philip, *Performing Music in the Age of Recordings*, 26-63. This chapter was published in a form of an article: 'Pierrot lunaire in studio and in broadcast: *Sprechstimme*, tempo and character' in *Journal of the Society of Musicology in Ireland (JSMI)*, 2 (2006-7), 69-91.

² See Clarke, 'Listening to performance', in Rink02, 187.

³ See Philip, *Performing Music in the Age of Recordings*, 47-49.

⁴ John Ardoin, review of 'The Furtwängler Record', *Notes*, 52/2 (December 1995), 483. See also Nicholas Cook, 'The Conductor and the Theorist: Furtwängler, Schenker, and the First Movement of Beethoven's Ninth Symphony', in Rink95, 105-125.

⁵ Stephan Davis, *Musical Works and Performances: A Philosophical Exploration* (Oxford: Oxford University Press, 2001), 295.

the nature of the recording process which has hardly subsided today'.⁶ In the first half of the twentieth century, studio recordings were often recorded in one take. The relatively low fidelity in sound quality is usually compensated by a relatively high fidelity with regards to tempo.⁷ During the second half of the twentieth century the sound fidelity improved increasingly, but, paradoxically, the technology could now offer recordings which did not represent any single live performance; such heavily edited recordings are a result of delicate studio work where the producers and sound technicians are deeply involved in the creative process and highly affect the final result. This is why the recordings of Schoenberg conducting offer a rare and relatively precise view into aspects such as tempo and character. Until recently, there was only one recording of each of the pieces that Schoenberg conducted.

Lately, I discovered a recording of a broadcast of *Pierrot lunaire* conducted by Schoenberg in the New York Public Library that does not appear in any catalogue.⁸ This excerpt dating from 17 November 1940 was part of a concert and was broadcast from Town Hall in New York; its duration is 23 minutes.⁹ Not all songs were included in the broadcast and two of them ('Die Nacht' and 'Die Kreuze') are incomplete. This is probably due to limits in broadcast time.¹⁰ The test pressings for the well-known commercial recording were made between 24 and 26 September 1940 in Los Angeles where the following musicians participated: Erika Stiedry-Wagner, *Sprechstimme*;

⁶ Michael Chanan, *Repeated Takes: A Short History of Recording and Its Effects on Music* (London, New York: Verso, 1995), 60.

⁷ Although the playback apparatus may have distorted the tempo to a certain extent.

⁸ I owe great debt to the Arnold Schönberg Center archivist, Therese Muxeneder, for suggesting that I should contact the New York Public Library and ask whether they have the recording. I am grateful to Lawrence Schoenberg and the Arnold Schönberg Center in Vienna for ordering the broadcast from the New York Public Library.

⁹ The announcer in the broadcast was Milton Cross.

¹⁰ The broadcast includes announcements, the songs 'Mondestrunken', 'Colombine', 'Der Dandy', 'Eine blasse Wäscherine', 'Valse de Chopin', 'Madonna', 'Der kranke Mond', a pause, the songs 'Die Nacht', 'Gebet an Pierrot', 'Raub', 'Rote Messe', 'Galgenlied', 'Enthauptung', 'Die Kreuze', and further announcements.

Rudolf Kolisch, violin and viola; Stefan Auber, cello; Edward Steuermann, piano; Leonard Posella, flute and piccolo; and Kalman Bloch, clarinet and bass clarinet.¹¹

Now that the broadcast of 17 November is available, it is possible for the first time to compare the two performances of this masterpiece under the composer's direction. The different experience of the broadcast in relation to that of the commercial recording did not pass unnoticed by Schoenberg and his friends, students, and reviewers, as we will see in a moment. In the broadcast, the woodwind performers were different, the ensemble being Erika Wagner-Stiedry, *Sprechstimme*; Rudolf Kolisch, violin; Frances Blaisdell, flute; Stefan Auber, cello; Eric Simon, clarinet; and Edward Steuermann, Piano. The discovery of a recording of the broadcast grants us a new perspective of Schoenberg's conducting with an ensemble consisting of performers who were part of his circle for almost three decades, such as Kolisch, Steuermann and Stiedry-Wagner, as well as completely new performers with various professional abilities. I will demonstrate how various different elements influenced the performances: namely, Schoenberg's attitude towards radio and recordings; the fact that he knew that he was documenting the composer's interpretation for future generations; the musical abilities of the new performers in each context; his flexible and changing attitude towards tempo; the sizes of the studio and hall, as well as the recording philosophy of the recording technicians.

Schoenberg's attitude towards the radio and recordings

Radio broadcasting was a new phenomenon that changed the world during Schoenberg's lifetime. In the 1920s radio networks were established and commercial radio began. The first recording dates from about 1887 and the first recording studio appeared at 1897.¹²

The earliest method of recording, used from 1877 and issued commercially from about

¹¹ The recording details are: Arnold Schoenberg, conductor, Los Angeles, CA, (24-26 September 1940), CBS MPK 45695 mono ADD (1989) CD.

¹² Chanan, *Repeated Takes*, 29.

1890 until 1929, was on phonograph cylinders. From 1894 to 1925, acoustically recorded shellac discs were used to record music. The advent of electronic recording, from 1925, brought several advantages: the frequency range broadened beyond an upper limit of 3 kHz to 5 kHz, and a realistic balance of large ensembles became available, with no recourse necessary to the rescoring needed for acoustic recordings of orchestral music. During the 1920s many musicians became deeply involved with radio broadcast commissions and earned much of their income out of radio work.¹³ By 1930s continuous recording was achieved with the use of several recording turntables.¹⁴ In 1940, the year when the recordings in this study were made, Schoenberg wrote: 'there is evidence that the audiences of classic music are growing constantly and that classic programs are played over the radio several times each week and operas are broadcast from the Metropolitan, coast to coast, and also by recordings from many a smaller station'.¹⁵ Schoenberg, who had some experience with radio broadcasting (see Table 6.1), reflected on the issue in some of his writings.

In 1930 he wrote: 'Quite certainly the radio is a foe! – and so are the gramophone and sound-film'.¹⁶ He defines the tone of the radio as 'unspeakably coarse', and fears that slowly the audience will prefer it to the live sound of instruments. He asks whether the fact that music is being played constantly on the radio may result in people being indifferent to music as they are to noise. In 1933 Schoenberg wrote that he expects the radio to 'reproduce everything as it actually sounds';¹⁷ however, he complains that with

¹³ *Ibid.*, 63.

¹⁴ For an introduction to this subject see Peter Johnson, 'The legacy of recordings', in Rink02, 197-212; and Timothy Day, *A Century of Recorded Music* (New Haven and London: Yale University Press, 2000), 1-58.

¹⁵ *SI*, 'Art and the moving pictures', 155.

¹⁶ *SI*, 'The radio: replay to a questionnaire', 147.

¹⁷ *Ibid.*, 'Modern music on the radio', 151.

| Date | Composition | Performers | Place | Comments | Source(s) of info |
|------------------|--|---|---------------------|---|-----------------------------------|
| 8 April 1927 | <i>Pelleas und Melisande</i> , Op. 5 | The Berlin Radio (Funkstunde) | Berlin | Invited by Hans von Benda the musical director of the radio. There were three rehearsals. Stuckenschmidt mentions that Schoenberg was invited often to conduct his works there. | Stuckenschmidt, 317. |
| 27 January 1928 | <i>Gurrelieder</i> | A. Wynn, speaker; Stiles Allen, soprano; Gladys Palmer, contralto; J. Perry, tenor; Parry Jones, tenor; F. Philips, baritone; National Symphony orchestra. National Chorus of London, Wireless Chorus, Civil Servic Choir, Lloyds Choir, Railway Clearing House Male Voice Choir. | London, Queens Hall | Schoenberg left on the 14 January for rehearsals (Stuckenschmidt 321). First British performance. The concert was broadcast. | Conducting score and Doctor, 599. |
| 27 February 1930 | <i>Von heute auf morgen</i> | Berlin Radio; Steinberg and his singers; Margot Hinnenberg-Lefèbre and Gerhard Pechners | Berlin | | Stuckenschmidt 331. |
| 9 January 1931 | <i>Erwartung</i> , Op. 17, Bach arr. Schoenberg Prelude and Fugue in E flat ('St. Anne') and <i>Friede auf Erden</i> , Op. 13. | Margot Hinnenberg-Lefèbre, soprano; BBC Symphony Orchestra, Wireless Chorus. | Studio 10, London | Invitation by Edward Clarke from the BBC. First rehearsals on 3 and 6 January 1931. Wrote to Webern on the 22 nd about the success. The concert was broadcast. First British performance of <i>Erwartung</i> and the Bach arrangement. | Stuckenschmidt 340, Doctor 616. |

| | | | | | |
|------------------|----------------------------------|--|----------------------|---|----------------------|
| 8 February 1933 | Variations for orchestra, Op. 31 | Elena Gerhardt (soprano), BBC Symphony orchestra | Queen's Hall, London | BBC Broadcast and concert. First public British performance. More information about this broadcast can be found in chapter 1. | Doctor, 627. |
| 17 November 1940 | <i>Pierrot lunaire</i> , Op. 21 | Erika Wagner-Stiedry, Sprechstimme; Rudolf Kolisch, violin; Frances Blaisdell, flute; Stefan Auber, cello; Eric Simon, clarinet; Edward Steuermann, Piano. | New York, Town Hall. | Broadcast. | Stuckenschmidt, 445. |

Table 6.1: Some of Schoenberg's radio broadcasts as a conductor

the exceptions, the vast majority of broadcasting stations transmit a sound where one hears only 'the upper parts' (Schoenberg's term) of the sound.¹⁸ He complains that the radio, making music more available to the public, caused concerts to be badly attended. He also claimed that the inventors of radio machines, who he believed to be only after money, invent radios which are not intended to 'serve art' but 'can be mass-produced and thrown cheaply on to the market, and ... brought out at least once a year in a new fashionable version that makes the earlier ones valueless'. He concluded that it 'is a sad and hope-destroying phenomenon'.¹⁹ Nuria Schoenberg, who was eight years old when her father recorded *Pierrot lunaire*, wrote: 'my father was very disappointed by the fact that the technicians turned up the volume on his *ppp* and turned down the levels on the *ff*,

¹⁸ Ibid.

¹⁹ Ibid., 152.

so that the dynamics were sadly limited. In those days the equipment was not able to reproduce extreme dynamics'.²⁰

Schoenberg's negative attitude towards the new technology might have been one of the reasons for the unpleasant feeling he had when recording in the studio. Dika Newlin was present in the recording session of *Pierrot lunaire* on 25 September 1940. She listened for three hours to seven songs in the second part of *Pierrot lunaire*²¹ and she reported that the process of recording was 'nerve-racking': 'You should have seen poor Uncle Arnold shake and tremble when the man in the recording booth called out, "Ten seconds!" before each take. Frau Wagner got so exhausted that by the time the work was over she could scarcely talk'.²² One must remember that this was the first occasion that Schoenberg was recorded for posterity as an interpreter of his own music on commercial recordings. At this time he felt that his music was being neglected or badly performed. This historical occasion, therefore, was by no means a relaxed one for Schoenberg and Stiedry-Wagner.

Schoenberg did see some value in the radio and especially in recordings, for they were potentially helpful in making his music more available to the general public. Eugen Lehner, the viola player from the Kolisch quartet, believed that the private recordings of the four string quartets, which were interpreted under the supervision of Schoenberg in the United Artists film studio, Hollywood, CA, 29 December 1936, were performed badly. He consequently refused to agree that they would be published when the opportunity occurred in 1949. On 10 February 1949 Schoenberg wrote to him: 'My music is almost totally unknown in America and also in present-day Europe. My sole interest must therefore necessarily be to take every chance of enabling people to hear some of it.

²⁰ Email from 8 July 2005 from Nuria Schoenberg-Nono to Avior Byron.

²¹ Since the test pressings were recorded in three days, this information suggests that on each day they recorded one part of the cycle.

²² Dika Newlin, *Schoenberg Remembered: Diaries and Recollections 1938-76* (New York: Pendragon Press, 1980), 255-256.

And so even if the recordings were really bad as you say, I cannot help being very glad if every one small company sees to it that the largest possible number of people get to know at least that part of my work'.²³ Lehner appears subsequently to have agreed and the recordings were published to Schoenberg's satisfaction.

The commercial recording and the broadcast

Reviewing the recording of the composer conducting his *Pierrot lunaire*, which was 'for nearly ten years ... the only major work of Schoenberg's maturity available on records', David Hamilton stated that 'the recorded sound was oppressively close and unresonant, stifling the instrumental colors – a performance in a padded cell, as it were, the acoustic ambience apparently justifying *Pierrot's* reputation as an unparalleled musical embodiment of frenzied neurasthenia. Nor was the recorded balance very helpful, for the heavier, slower-speaking instruments frequently drowned out the softer, lighter ones (as well as the important vocal part)'.²⁴ Hamilton continued: 'Portions of *Pierrot* can justly be described as "gossamer," and they were in fact expertly played in Schoenberg's recording, but only an experienced aural imagination, coupled with study of the printed score, could bring the textures emerging from the grooves to within shouting distance of that adjective'.²⁵ According to Hamilton the *Sprechstimme* of Erika Stiedry-Wagner sounded, especially in America, 'intensely emotional, often hysterical'. He added that 'to most of that generation, these records *were Pierrot*, and a formidable, perhaps repellent experience it was'.²⁶ A different view was expressed by Kalman Bloch, the clarinetist in the recording that Schoenberg conducted: 'Despite some minor balance problems and

²³ *ASL*, 268.

²⁴ David Hamilton, 'Moonlighting', in *From Pierrot to Marteau* (Los Angeles, California: University of Southern California, Arnold Schoenberg Institute, 1987), 46, originally from *The New Yorker* (8 April 1974), 46.

²⁵ *Ibid.*

²⁶ *Ibid.*

what now must be considered primitive recording techniques, the recording was and still is a tremendous success. Conductors (Zubin Mehta, Simon Rattle, etc.) have told me that after listening to the many recordings produced since then, it was this one they absorbed as their greatest insights into the music'.²⁷

On 6 December 1936 Schoenberg received the following telegram from Columbia Phonograph Company: 'For collection of examples of last forty years most prominent musical works which we contemplate recording in hope of making recorded modern music more popular we are anxious to record in Paris last two movements of *Pierrot lunaire* with Marya Freund and players who have often performed under your direction your pupil Walter Goehr will be responsible for recording would you please grant permission'.²⁸ On 7 December 1936 Schoenberg answered Columbia by telegraph, refusing to permit a partial recording of *Pierrot lunaire*. He also made the condition that any recording of the piece should be with him conducting. Twelve days later he sent them another telegram which shows that Schoenberg was not only aware of the power of recordings to spread his music in the present (as mentioned above in the letter to Lehner), but also its strength in capturing his conducting as an important historical event:

As I wired, I am very sorry I could not give you the permission to record the last two movements of my *Pierrot lunaire*.

The second reason is that I am not sure whether the permission to record parts would mean that never, or at least as long as I live, the whole work would be recorded.

But the very first reason is: I find an author like myself, who has made history but nevertheless has been neglected by the phonograph companies for more than twenty years can not consider this as a worthy representation of his art.

Besides another matter astonishes me. I am now sixty two years of age and do not know how long I will live and how long I would be able to conduct my own works. Is there nobody in this industry who knows that and knows that it might be of some value for this industry to have at least some of my works in an authentic recording. Is there nobody who foresees that our successors will ask how it was possible at a time where the technique was advanced enough to preserve the original doings of the most unimportant people for eternity, but was there nobody who knew that there is a man who will be of some interest in the future, but this man remained in the dark, like in the old age?²⁹

²⁷ Kalman Bloch, 'Some Reflections on the First Recording of *Pierrot lunaire*' in *From Pierrot to Marteau*, 49.

²⁸ The telegram can be found in ASC.

²⁹ Unless stated otherwise, all documents in this section can be found in ASC.

It seems that Schoenberg's decision was a wise one since on 8 August 1940 Columbia offered to pay him 'an outright royalty of 5% or a royalty of 10% with payments to musicians and Mrs. Stiedry' for the complete recording of *Pierrot lunaire*. On 15 August 1940 Moses Smith, the director of Columbia, wrote to Schoenberg: 'I have already outlined to you in conversation, I am attempting to allocate to you, in the guise of conductor, some of the rights which I believe are yours as composer'. On 5 September 1940 Smith wrote that he would like all the performers participating in the recording to join the Musicians' Union according to the terms of the licence that Columbia had with the Union. He did not ask Schoenberg to join the Union but suggested an alternative: 'I shall want the right to designate you on the labels of the finished records as the supervisor rather than as the conductor of the performance. I am sure that we can work out something not undignified, such as the phrase "such-and-such musician under the supervision of Arnold Schoenberg"'. Since Schoenberg wanted history to remember that the historical performance was his 'authentic' interpretation, it was natural that he was not happy with the offer. On 5 October 1940 he wrote: 'I was very annoyed by the idea that my conducting should be called supervision and I understood, that the only convenient solution is that I become a member of the Union – which I did'.³⁰ On 19 September 1940 the contract for the recording was sent to Schoenberg offering him (as a conductor) '5% of the retail list price in the country of manufacture, of 90% of all records sold...!'

After the recording was ready Schoenberg wrote on 30 September 1940 to Moses Smith, claiming to be 'very happy about the records', yet he claimed: 'I had admitted Dr. Stiedry to the rehearsal and recording sessions. He is an old friend of mine, but, like all my superiors--the conductors--he thinks he is unfailing, which made me often angry enough'. Schoenberg continued: 'For instance when he insisted (and succeeded) that I

³⁰ This was written as part of the letter dated 30 September 1940 to Moses Smith.

must at first correct the error he had observed and would not let me do what I found important. This went as far as to demand that I take his tempi instead of that of the composer. Next time I will be more cautious'.³¹ Furthermore, Schoenberg wrote a note on the record sleeve saying that Kolisch 'knows the music better than I myself know it, and, thus, I was happy that he was the one who prepared the new ensemble for the recordings'.³² Although Schoenberg complained that Stiedry interfered, and acknowledging too that Kolisch had prepared the ensemble for the recording, one should not underestimate Schoenberg's role. After all, he was the one who conducted the piece with most of the performers in the recording on many other occasions; and he trusted Kolisch to convey his performance intentions when coaching the ensemble.

The most interesting atmosphere of the rehearsals to the recording was captured by Newlin in an entry in her diary from 4 September 1940:

most interesting was all the dirt dished up about the recording of *Pierrot lunaire*... it has all the earmarks of a recording that will never be made. Schoenberg gets mad and won't direct rehearsals, leaving that to Kolisch; Kolisch gets mad, I don't know why; Linden leaves town for a few days, thus balling things up immeasurably... Kalman Bloch has never touched a bass-clarinet in his life; no parts are to be had, and the players are having to play from miniature scores until such time as parts can be copied (Stein and I are going to get to work at that right away); all the full-sized scores in the U.S. seem to be out of commission in one way or another... ; Schoenberg wants the recording made before school starts, and Erika Wagner will be in town any day now, but it couldn't possibly be done before two weeks; then it would be too late because Kolisch and Steuermann will have gone back to N. Y. to participate in the performance under Klemperer! Schoenberg is mad about that because he doesn't think Klemperer sympathetic to his works; Schoenberg is mad at Kolisch because he gave Kolisch the choice of taking the cost of the recording or the royalties and K. chose cost (doubting, and I suppose rightly, that the royalties would be worth taking). Did you ever hear of such a mix up in your life?³³

³¹ See ASCW (correspondence), http://www.schoenberg.at/6_archiv/correspondence/letters_database_e.htm.

³² Stuckenschmidt, 442.

³³ Newlin, *Schoenberg Remembered*, 243.

Bloch indeed confirmed: 'the task of performing on the bass clarinet was a new experience. I had to borrow the best instrument available and learn it quickly. I took some special lessons from colleagues – for the part is difficult'.³⁴

The broadcast was organized by the New Friends of Music, a group of new music performers who were highly professional. The context and atmosphere there seem much more positive compared to that of the commercial recording. Shortly before the performance Schoenberg wrote to his family: 'The rehearsal was very good—virtually unnecessary. Much better flute. The clarinetist Simon is very good'.³⁵ Newlin wrote in her diary entry of 18 November 1940: 'Everyone says that ... [the broadcast] was very fine indeed, better than that on the records in that the balance between voice and instruments was finer; and the flute passages were exceptionally well done'.³⁶ On 18 November 1940 he telegraphed at 7:07 am: 'Performance was excellent'. Schoenberg received many letters and telegrams from family, friends, students and other people (such as Hanns Eisler) with compliments for the broadcast and greetings. On 18 November he wrote to his family about the concert: 'the success was great and the critic is extraordinary... All the people said that one must have me here every year'.³⁷ On 18 November 1940 Olin Downes wrote in *The New York Times* that the performance 'was one of the most impressive experiences that a musical audience has had in seasons in this city... At the end all the artists and finally Mr. Schoenberg were recalled again and again to the stage'.³⁸

³⁴ Kalman Bloch, 'Some reflections...', 49. Note that the fact that he was unfamiliar with the bass clarinet remains typical in the USA (I would like to thank Paul Banks for this information).

³⁵ 'Die Probe war sehr gut--fast unnötig. Viel bessere Flöte. Clarinette Simon ist ganz gut'. Letter sent on 18 November.

³⁶ Newlin, *Schoenberg Remembered*, 279.

³⁷ 'Der Erfolg war groß, und die Kritik ist ausserordentlich... Alle Leute sagen, man müsste mich hier jedes Jahr haben'.

³⁸ ASC, Clippings C19401117_a_1" and "C19401117_a_v".

Not all criticism was positive. Francis D. Perkins wrote that *Pierrot lunaire* 'is indeed music of the past' and that 'Some of its fine points ... appeal to the eye familiar with the printed notes rather than to the ear'.³⁹ Concerning the *Sprechstimme* he asked: 'Would not the composer's purposes be better achieved by ... straight declamation or definite song?' He admitted that 'the performance itself ... merited much praise'. Also Harriett Johnson wrote in *The New York Times*⁴⁰ that it was a good performance, yet she too claimed in a negative tone: 'the composition still sounds to me, as it did 15 years ago when I first heard it, like an unsuccessful experiment rather than a great work of art'. She, too, did not like the *Sprechstimme*: 'No matter how hard the voice tries, if it can't sing, and it's supposed to interpret a fantastic poem that pursues both blood and ecstasy in the midst of moonlight, what can I do but wail?' All reporters were impressed by the counterpoint in the score but argued that it was not possible to hear it, in the actual listening experience. Note that also the negative reports of the concert, concentrated their unenthusiastic criticism on the composition, yet they did not fail to praise the performance.

Schoenberg's conducting of *Pierrot lunaire* was appreciated by both performers and reviewers. In his review of 18 November 1940, mentioned above, Downes, wrote:

Mr. Schoenberg proved an absolute master conductor of his own music. He has no poses; he is unthinkable as virtuoso leader or a poseur of the baton strutting his hour. He is concerned solely with his task, and he is technically able to project his precise intention by means of simple, economical, unmistakable movements. He impressed his music upon the audience as immediately as he effaced himself from any conspicuousness. The sheer precision and power of his thought governed the interpreting artists.

On 24 November 1940 he further wrote:

What Mr. Schoenberg could do if he conducted his compositions for full symphony orchestra is not known hereabout. But if – and why not? – he can do with a full orchestra what he did with five chamber music players and a soprano at the New Friends of Music

³⁹ The name of the newspaper starts with 'New York' yet the rest of it and the date are cut from the copy that is in ASC.

⁴⁰ The exact date is unknown.

concert, then he is one of the few composer-conductors who are indispensable for the complete understanding of their music. If conductors of our great symphony orchestras have come no nearer Schoenberg's real intentions than they came at previous hearings in this city of '*Pierrot lunaire*', then we have never heard the major Schoenberg scores.⁴¹

Bloch, the clarinet player, likewise claimed that Schoenberg was a 'fairly efficient conductor. No one could better impart the significance of all the musical details'.⁴²

The conducting score

Before proceeding to a comparison of the commercial recording and the broadcast, and in order to understand Schoenberg's flexible attitude towards tempo, I will examine his tempo indications as manifested in various conducting scores which were used in different periods for conducting *Pierrot lunaire*. The première and the first *Pierrot* tour (1912) were conducted with the autograph manuscript, written between March and July 1912 (source **B** as denoted in the listing of the edition of *Pierrot* by Josef Rufer for the *Sämtliche Werke*).⁴³ The concerts after July 1914 were conducted from a conducting score (**D2**) based on the first edition (**D**).⁴⁴ On the first page of **D2** one can find a list of cities and dates where performances took place.⁴⁵ The first concert mentioned there was

⁴¹ Olin Downes, '*Pierrot lunaire*: Schoenberg's conception of his score brings out its true merit', *The New York Times* (24 November 1940), in *DPP*, 157-158.

⁴² Bloch, 'Some reflections...', 49. For a discussion of Schoenberg's conducting technique see chapter 1.

⁴³ The manuscript can be found in The Library of Congress, Washington, D.C., Gertrud Clarke Whittall Foundation Collection. Another autograph that was written between March 1912 and January 1914 might have been used at the performance of 1913 in Busoni's house in Berlin. This is identified as **C** in the edition prepared by Josef Rufer (Arnold Schönberg, *Sämtliche Werke, Pierrot lunaire*, section 6, series B, vol. 24/1 (Wien: Universal Edition AG and Mainz: Schott Music International, 1995)) hereafter will be referred to as **GA**) and can be found in Pierpont Morgan Library, New York, Robert Owen Lehman Collection. There are also parts from the performance of 1912 (mentioned in a letter from 1922 from Albertine Zehme to Hertzka from Universal Edition. **CM*** in **GA**), yet these were probably lost.

⁴⁴ Universal-Edition Wien Leipzig, U.E. 5334 first printed at July 1914. There is another conducting score found in Schoenberg's Nachlass (**D1**) which was probably not used by Schoenberg since the annotations there are not in his handwriting and are in English (some of the annotations are translations of the text which show that the conductor did not know German). There is a third annotated score (**D3**) with the same tempo corrections but with, in total, far fewer annotations than **D2**. Reinhold Brinkmann suggests that the tempo changes were made as a consequence of the performance experiences Schoenberg had in 1922 and 1923 (**GA**, 40); however Schoenberg did perform the piece also in 1914 and one should not disregard the experience he had from conducting the piece in 1921 as well as listening to Erwin Stein conduct it on many occasions.

⁴⁵ The list can be found in Schönberg, **GA**, *Pierrot lunaire*, VI/24,1, 34.

on 25 May 1922 in Prague. This conducting score was used in two major tours: one in 1922 and one in Italy in 1924.⁴⁶ On the same page Schoenberg wrote with pencil 'Records made/ September 24-26, 1940'. This suggests that this score was used as a conducting score for the European tours of the 1920s, the 1940 Columbia recording and the 1940 broadcast.⁴⁷

There are very few changes concerning tempo between the two autographs of 1912-14 (**B** and **C**).⁴⁸ A significant change, however, can be found between these autographs and the first edition of 1914 (**D**). In **D**, one finds exact metronome markings in addition to the verbal tempo indications. Seven of the songs contain metronome indications with a given range (i.e. ♩ = 96 - 100). Others contain an approximate metronome indication around a given number (i.e. ♩ = ca 66). This demonstrates that Schoenberg's conception of the tempo changed and probably became more exact, due to the experience of the 1912 tour. Yet the fact that he gave a range of metronome indications to many of these songs suggests that he might have expected a flexible tempo in performance, or at least one that is not completely strict and mechanistic. This practice is consistent with his performance aesthetics of the time (see his letter of 24 August 1909 to Busoni, mentioned in chapter 3).

Further significant changes in the conception of tempo can be found when comparing the conducting score (**D2**) with the first edition (**D**). Here one notices that

⁴⁶ At the end of the conducting score there are dedications from three performers to Schoenberg dating from 8 April 1924. See GA, VI/24.1, 35 for a transcription.

⁴⁷ As well as on other single occasions after 1922; for a list of concerts with Schoenberg conducting see appendix 1.

⁴⁸ See the table on page 43 in Schönberg, GA, *Pierrot lunaire*, VI/24,1 for a complete picture of tempo changes in the various sources.

another three songs have received a range of metronome markings instead of one particular marking,⁴⁹ and in 'Eine blasse Wäscherin' the tempo was changed from 'Mässige ♩ (ca 60)' to the following verbal indication and metronomic range: 'Fließend, aber abwechslungsreich (♩ = 60 – 92)' [Flowing, but varied (or eventful)]. In 'Heimweh' he changed 'Mässig Bewegte' [Moderate movement] to 'In abwechslungsreicher Bewegung' [In varied movement].⁵⁰ In other cases he also reduced the beat to be conducted: for example, in 'Colombine' from ♩ (ca 126), to '♩ = 42 – 48'.⁵¹ Moreover, in 'Nacht' the tempo was reduced from ♩ (ca 88) to ♩ (ca 80)', yet in 'Parodie' he increased the tempo from ♩ = ca 120' to ♩ = ca 132'.⁵² One can see three kinds of changes: (1) a imposition of a more precise indication of tempo and tempo fluctuations; (2) a contradictory tendency to indicate a range of metronome indications instead of one given metronome indication (as well as his indications for 'flowing' and 'varied movement'; (3) increases or decreases of tempo in relation to **D**. On the verso of the page with the introduction in the arrangement of *Pierrot lunaire* for voice and piano (**H**) by Erwin Stein it is written that 'on the ground of performance experiences the tempo

⁴⁹ For example in 'Mondstrunken' from ♩ = ca 66', to ♩ = ca 66 – 76'.

⁵⁰ In the same song he also added ♩ = ca 84' to the last beat of m. 12 where was previously indicated only 'a tempo grazioso'. In mm. 50-53 of 'Serenade' Schoenberg wrote in red pencil 'mehr rit' suggesting increasing the unnotated ritenuto at the end of this song. In 'Heimfahrt' he changed the tempo from ♩ (ca 126 – 132)' to '(♩ = 42 - 46)'.
⁵¹ In 'Valse de Chopin' from ♩ = ca 138' to ♩ = 46 – 50'; in 'Der Dandy' he only reduced the beat from ♩ (ca 152) to ♩ = 76; and in 'O alter Duft' from '(♩ = ca 120)' to '(♩ = ca 60)'.
⁵² In 'Parodie' he also added 'Tempo I' (underlined) at the end of m. 26, and 'accel' in the following measure.

indications of the first edition were changed'.⁵³ Yet this was not only an alteration due to performance experience, but also a major evolution in the conception of tempo which occurred just after the First World War. These tempo changes (in **H** and **D2**) were made before May 1923.⁵⁴ As mentioned in chapter 3, in these years, the *Neue Sachlichkeit* (and other art and music movements) flourished in Germany and Europe and were influential also in performance practice. The idea of an exact notation of tempo in order to make the composer's intentions as clear as possible, while leaving a place for flexible expression for real-time performance with the help of verbal indications and a given range of tempo, is consistent with Schoenberg's performance aesthetics between the two World Wars.

The process of change also continued some time later in the 1940 recording. The aforementioned indications from the first page of **D2** and of a pause of '3 seconds' between 'Mondestrunken' and 'Colombine', written with pencil and in English, suggest that Schoenberg used a pencil at the time of the 1940 recording. One can find the following late changes notated in pencil: in m. 33 of 'Colombine' Schoenberg changed the indication 'viel langsamer ($\downarrow = ca 66$)' in m. 33 to 'etwas langsamer ($\downarrow = ca 100$)'.⁵⁵ Between 'Colombine' and 'Der Dandy' he crossed out the two measures of rests annotated in blue pencil and wrote '3"/ no rest' (with a grey pencil). In performances from the 1920s Schoenberg indicated various rests with or without fermatas as pauses between the songs, while in 1940 he annotated more precisely the exact durations in seconds. In 'Der Dandy' Schoenberg suddenly changed from conducting in minims to conducting in crotchets.⁵⁶

⁵³ 'Auf Grund von Aufführungserfahrungen wurden einige Tempobezeichnungen der ersten Partiturausgabe vom Komponisten geändert'.

⁵⁴ The date annotated in pencil on the verso of the page with the introduction, on the piano and voice arrangement of *Pierrot lunaire*, which includes all of the tempo changes of **D2**. The arrangement (U. E. 7144) can be found in the ASC.

⁵⁵ The latter indication can be found already in the 1923 voice and piano arrangement of *Pierrot lunaire* (**H**).

⁵⁶ The first edition has both four crochets and in parentheses 'allabreve', yet in the conducting score Schoenberg wrote in red pencil 'Halbe' and in blue pencil he notated a big minim. In 1940 he deleted the

At the fourth measure he indicated a division into two beats and in m. 6 he returned to four beats per measure.⁵⁷ It seems that the changes in the 1940s were due to the influence of the commercial recording and broadcast contexts where he was forced to think about the exact duration of the spaces between the songs as well as clarify his conducting in 'Der Dandy' for the new performers.

Reinhold Brinkmann asks why Schoenberg did not demand that Universal Edition incorporate these changes (in **D2** and **H**) in the later editions of 1924, as well as the study scores of **DTa** and **DTb**, especially in the light of Schoenberg's insistence on similar changes in the scores of other compositions.⁵⁸ This problem, which has no single solution, puts the editor and the performer in a situation where one cannot know what kind of tempo indication Schoenberg preferred. The composer changed his conception several times concerning the tempo and character of most of the songs during his lifetime of performing *Pierrot lunaire*.⁵⁹ One can choose between either **D**, **D2**, or **B** (which was used initially by Steuermann and Zehme).⁶⁰ In spite of the fact that there are significant differences in the conception of tempo, it seems that one version of *Pierrot lunaire* has no a priori preference over the others. Are the annotations made during the 1912 creation of the composition more significant than those in 1940 which were made after years of conducting experience? Perhaps one should prefer the annotations from the 1920s, which were made before Schoenberg confronted the recording and broadcast technology? Or perhaps an eclectic approach, combining various elements from the different sources,

'Halbe' with a rubber and crossed the minim with his pencil. Similar erasing can be found in other places in the song.

⁵⁷ A similar change in conception can be found in 'Gebet an Pierrot'. The first edition asks for *alla breve*. Schoenberg notated in the 1920s in red pencil 'Viertel' and wrote a quaver before the tempo indication 'Mässige'. In 1940 he erased there annotations and drew a large minim with a pencil (repeated also before the piano). In m. 8 he returned to conducting quavers ('4' annotated with pencil at this place).

⁵⁸ GA, 40-41.

⁵⁹ For other cases where information in Schoenberg's conducting scores in particular and Handexemplares in general effected later editions see Jerry McBride, 'Schoenberg's Annotated Handexemplare', in *JASI*, V/2 (Nov. 1981), 183-202.

⁶⁰ Brinkmann, 'What sources tell us about *Pierrot lunaire*', in *From Pierrot to Marteau*, 35.

would be preferable? Knowledge and experience can help in balancing the various options. Yet the choices between the possibilities would ultimately have to rely on the values and subjective preference of the performer and/or editor.

Comparative analysis of recordings: the broadcast and the commercial recording

In this section I will compare the broadcast and the commercial recording with reference to their different contexts, focusing on aspects of tempo, *Sprechstimme* contour, recording philosophy and character. Table 6.2 presents a comparison of tempos in some of the songs of *Pierrot lunaire* where the performed tempo is relatively stable in the recordings (in the sense that it is not constantly fluctuating). Columns 2-4 show tempo indications from various manuscripts and editions of the piece. Columns 5 and 6 give the initial tempo of the songs as manifested in the commercial recording and the broadcast.

| Song | Autograph (C) | First edition (D) | Conducting score (D2) | Commercial recording | Broadcast |
|--------------------------|----------------------------|--------------------------------------|---|-----------------------------|------------------|
| 1. Mondestrunken | <i>Bewegte</i> ♩ | <i>Bewegte</i> (♩ = ca 66) | <i>Bewegte</i> (♩ = 66-76) | ♩ = 68 | ♩ = 68 |
| 2. Colombine | <i>Fließende</i> ♩ | <i>Fließende</i> ♩ (ca 126) | <i>Fließende</i> ♩ = 42-48 | ♩ = 102 | ♩ = 102 |
| 4. Eine blasse Wäscherin | <i>Mäßige</i> ♩ | <i>Mäßige</i> ♩ (ca 60) | <i>Fließend, aber abwechslungsreich</i> (♩ = 60 – 92) | ♩ = 68 | ♩ = 74 |
| 5. Valse de Chopin | <i>Langsamer Walzer</i> ♩. | <i>Langsamer Walzer</i> (♩ = ca 138) | <i>Langsamer Walzer</i> ♩. = 46-50 | ♩ = 133 | ♩ = 130 |
| 6. Madonna | <i>Mäßige langsam</i> ♩ | <i>Mäßige langsam</i> (♩ = ca 50) | As in D | ♩ = 59 | ♩ = 56 |
| 12. Galgenlied | <i>Sehr rasch</i> | <i>Sehr rasch</i> (♩ = 60) | As in D | ♩ = 115 | ♩ = 120 |

| | | | | | |
|-----------------|---------------------------|------------------------------------|----------------|---------|---------|
| 13. Enthauptung | <i>Ziemlich bewegte</i> ♩ | <i>Ziemlich bewegte</i> ♩ (ca 126) | As in D | ♩ = 108 | ♩ = 126 |
|-----------------|---------------------------|------------------------------------|----------------|---------|---------|

Table 6.2: Initial tempo of songs⁶¹

In the first two songs the tempo is the same in the commercial recording and the broadcast, yet note that in 'Colombine' the tempo in both recordings is much slower than in the scores. There are two cases (the songs 'Valse de Chopin' and 'Madonna') where the tempo is slightly faster in the commercial recording; in 'Valse de Chopin' the tempo in both recordings is slower than that indicated in the scores. There are three songs ('Eine blasse Wäscherin', 'Galgenlied' and especially 'Enthauptung') where the commercial recording is significantly slower. It seems very likely that the decision to perform these songs in a relatively slow tempo is due to the technical difficulties facing the new performers. 'Galgenlied', for example, is a very brief song which contains a sweeping *accelerando*. Starting this song in a fast tempo would have made its last seconds impossible for those new performers. In the song 'Enthauptung' the tempo in the commercial recording is slower than those performed in the broadcast and indicated in the score. Although new performers participated on both occasions, the slower tempo probably due to the difficulties with those new performers in the commercial recording, alluded to in the testimony of Dika Newlin that we saw earlier.

I will argue in chapter 7 that the *Sprechstimme* notation in *Pierrot lunaire* begs for a process of real-time interaction with the dramatic and musical text more than an exact reproduction of notated pitch. The commercial recording and the broadcast represent two distinct expressions of that process. The broadcast tends to be higher in *Sprechstimme* pitch. Compare the opening of 'Eine Blasse Wäscherin' with the text: 'Eine blasse Wäscherin wäscht zur Nachtzeit bleiche Tücher' (See a pallid laundrymaid washing,

⁶¹ Columns 2-5 are based on information from Arnold Schönberg, GA, *Pierrot Lunaire*, 43-44.

nightly faded linen⁶²); at this place one can hear the word '*Nacht-zeit*' (nightly) articulated with higher pitch in the broadcast (Sound ex. 6.1; CD-23) than in the commercial recording (Sound ex. 6.2; CD-24). In the next sentence in the song '*nackte, silber weiße Arme streckt sie nieder in die Flut*' (naked, silver-whitish arms stretching downwards in the flood), the words '*nackte*' (naked) and '*nieder*' (down) in mm. 7-8 are in the commercial recording (Sound ex. 6.3; CD-25) delivered with a pitch about high as in the score, while at the broadcast (Sound ex. 6.4; CD-26) the pitch is a fourth higher. This phenomenon, which also occurs in many other places, is connected to the different character which is affected by the faster tempo in the broadcast. In the broadcast, the performers probably felt much freer than in the commercial recording where they knew very well that they were recording an historical event for generations to come.

In m. 14 one can find the only word that is instructed to be sung in this song, the word '*breitet*' (lays out or spreads) where in the song the tender maid of heaven lays out, or spreads, all her linen woven of moonbeams on the darkling meadows. This poetic moment in the song is performed differently in the two recordings (see Figures 6.1 and 6.2⁶³ and hear Sound ex. 6.5; CD-27 and Sound ex. 6.6; CD-28, accordingly). In the broadcast Stiedry-Wagner sings much more openly the last syllable of the word

⁶² Translation by Andrew Porter which can be found in *From Pierrot to Marteau*, 28.

⁶³ Pitch in figures 6.1 and 6.2 is indicated in Hertz values; the duration in seconds. The straight lines are of the instruments (unless it does a trill or vibrato) while the voice has greater tendency for glissandos. For more information see one of the many manuals on the web. For example, the one by Rob Hagiwara at <http://home.cc.umanitoba.ca/~robh/howto.html>.

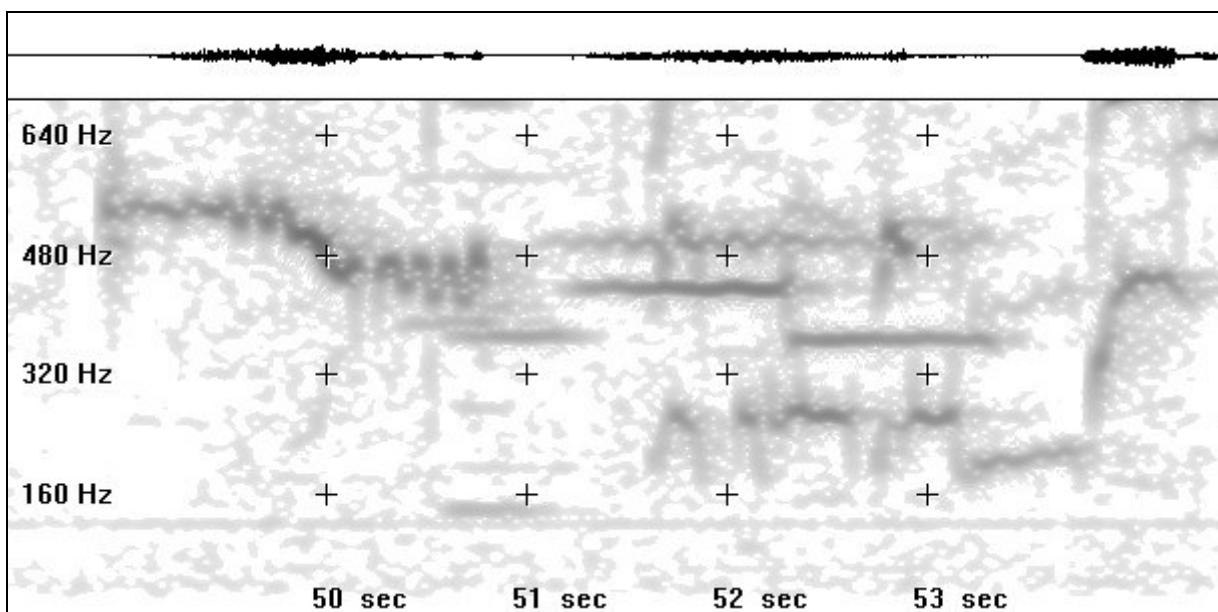


Fig. 6.1: 'Eine Blasse Wäscherin', *Pierrot lunaire*, spectrogram of the text: 'breitet auf die dunklen Wiesen' (mm. 14-15) in broadcast

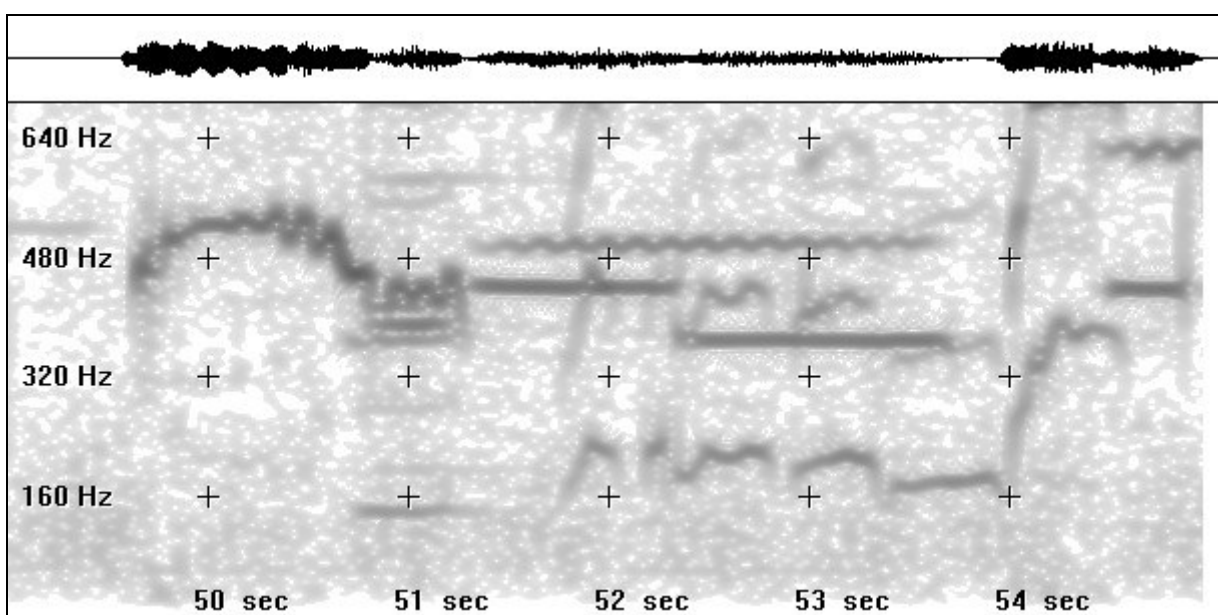


Fig. 6.2: 'Eine Blasse Wäscherin', *Pierrot lunaire*, spectrogram of the text: 'breitet auf die dunklen Wiesen' (mm. 14-15) in commercial recording

('brei-tet'). Here one also can notice that the next sentence (m. 15) is higher in the broadcast than to the commercial recording. This too suggests further vocal freedom in the broadcast comparing to the commercial recording. Paradoxically, the fact that Schoenberg chose slower tempos in some of the songs, probably because he was tenser in the commercial recording, created a calmer performance. In the broadcast, however, the

opposite happened: he had better performers and the situation was not documented on record for commercial use; therefore, the less stressful situation enabled him to perform some of these songs in a faster tempo and the performers could be focused more on the real-time and dynamic musical process rather than on a reproduction of a historical musical monument.

The following examples will clarify this point. The first line of the song 'Enthauptung': 'Der Mond, ein blankes Türkenschwert' (The moon, a shiny Turkish sword), sounds more relaxed in the commercial recording than in the broadcast. The slower tempo is an important factor influencing this character. Note especially the words 'Mond' (in the commercial recording: f sharp', hear Sound ex. 6.7; CD-29; in the broadcast: b flat', hear Sound ex. 6.8; CD-30) and the last syllable of the word 'Türkenschwert' (in the broadcast: c sharp", hear again Sound ex. 6.8; CD-30; in the commercial recording: g', hear again Sound ex. 6.7; CD-29). These differences appear prominent in notes with long duration. Another example of pitch differences is the word '*schmer-zens*' (painful) in the sentence 'durch schmerzens dunkle Nacht' ('in sorrow-darkened night') in the commercial recording (Sound ex. 6.9; CD-31) and broadcast (Sound ex. 6.10; CD-32). This phenomenon occurs yet again in m. 12 with the text 'Pierrot irrt ohne Rast umher' ('Pierrot restlessly roams about'), in the commercial recording (Sound ex. 6.11; CD-33) and broadcast (Sound ex. 6.12; CD-34).

The moon has a special symbolic role in *Pierrot lunaire* and accordingly Schoenberg grants it a relatively long duration in the score. In mm. 12-14 of 'Enthauptung' the text is as follows: 'Pierrot irrt ohne Rast umher und starrt empor in Todesängsten zum Mond,' (Pierrot restlessly roams about and stares on high in deathly fear at the moon). In both performances, Stiedry-Wagner gives special attention to the word 'Mond' (moon) in m. 14, yet she performs it lower in pitch and with a less urgent

character than in the commercial recording (hear the last word at Sound ex. 6.13; CD-35) than in the broadcast (hear the last word at Sound ex. 6.14; CD- 36).

The song 'Der kranke Mond' is not an exception in relation to other songs, in that there is lower pitch in the *Sprechstimme* contour of the commercial recording. Hear for example the first sentence: 'Du nächtig todes kranker Mond' ('O somber deathly-stricken moon') in the commercial recording (Sound ex. 6.15; CD-37) and compare that of the broadcast (Sound ex. 6.16; CD-38). There are many further examples of this in this song and in others. In several cases where the pitch is spoken approximately at the same level in both recordings; in a few places the pitch in the commercial recording is higher than that in the broadcast. Yet, these are exceptions that prove the rule.

The fact that Stiedry-Wagner sang without a score might have influenced the following mistake in the realm of rhythm – something that she was proud of reproducing in a perfect manner. In the song 'Madonna' she accurately reproduces the rhythmic values of mm. 5-6 (see Ex. 6.1 and hear Sound ex. 6.17; CD-39) yet in the broadcast she shortens the last note in m. 4 resulting in a shift of all that was to come later (again accurate singing with the ensemble only at m. 8, hear Sound ex. 6.18; CD-40). It is well known that such mistakes were not uncommon in musical performances in the first part of the twentieth century, and that they were not regarded as severely as they were in the second part of that century as well as today. This is but an example for a shift in cultural values where flexibility and spontaneity in performance used to be valued more highly than fidelity to the score. The performers in the broadcast knew that most people would never discover such mistakes. In contrast, the performers in the commercial recording had every reason to believe that many people would judge the performance with a score in hand.

The sizes of the studio and the broadcast hall as well as the recording philosophies of the sound technicians affected the character of the recordings. In an interview with Newlin, she said: 'this was a fair sized studio, I don't recall which studio building was used, this was whatever space Columbia Records were using at that time. It wasn't a huge room. I'd say it was sort of a middle-sized performance space'.⁶⁴ The broadcast, on the other hand, was performed before an audience in the large space of the Town Hall in New York. Moreover, the different recording conceptions had a decisive role. Michael Chanan pointed to the historical development of two contrary philosophies of recording due to the advance of electrical recording by 1925: 'One was based on the conception of bringing the listener into the studio or auditorium. In this method, the microphone was placed at a distance that included the natural room resonance of the studio, or acoustical reflections of the auditorium... The contrary philosophy was the 'close-up' radio broadcast, where small groups of performers would use a small, acoustically dead studio and work close to the microphone'.⁶⁵ The latter method created the impression that 'the singer and the song are transported into the presence of the listener'.⁶⁶ Listening to the recordings of *Pierrot lunaire* gives the impression that the broadcast technicians aimed to bring the listener into the auditorium while the studio technicians used the contrary 'close-up' philosophy. This is supported by the testimony of Nuria Schoenberg who remembered her father telling Stiedry-Wagner to 'be a part of the ensemble, like another instrument', and that 'she should not sound like a soloist'. Nuria Schoenberg suggested that this 'was another aspect which was probably not recorded properly, because the technicians would have had her microphone bring out the voice part and make the

⁶⁴ See appendix 4.

⁶⁵ Chanan, *Repeated Takes*, 59-60.

⁶⁶ *Ibid.*

instruments an accompaniment, as was usual'.⁶⁷ The different recording philosophies affected the balance and tone quality of the performances.

Conclusion

The analysis above reveals that tempo and pitch are relatively stable and more careful in the recording for posterity (in some cases, the tempos are positively slow and wary), and freer in the broadcast. The differences are prominent especially in places where the text is to be delivered in an emphasized manner. In 1926 Schoenberg wrote: 'nowadays I take everything in my works a basic degree quicker than at the earliest performances, when partly for technical reasons (difficulty and inadequate dynamics), partly to obtain flexibility, I consciously and unconsciously took everything much too slowly'. His habit of adjusting the tempo due to technical difficulty and for obtaining flexibility played a major role in these performances.⁶⁸ Since the commercial recording was also a more stressful situation, no wonder that Schoenberg often chose slower tempos for the songs than in the broadcast; the challenge to achieve a quality performance with an ensemble including some new performers was formidable due to the recording's historic status as the first commercial one conducted by the composer. Add to this Schoenberg's aversion to this new technology and it seems probable that the once-off broadcast seemed much less threatening than the commercial recording – a monument that would symbolize posterity his own interpretation of the work. In popular music the differences between live and studio performances are usually more openly acknowledged than in Western art music. The great differences in tempo, *Sprechstimme* contour, character and sound quality of these performances under Schoenberg's conducting, and the diverse historical

⁶⁷ Email from 8 July 2005 from Nuria-Schoenberg Nono to Avior Byron.

⁶⁸ See chapter 4 for a further discussion regarding this quotation.

reception of the two, suggest that also in Western art music, the context of performance is crucial for analysis or any other type of musical understanding.