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Commercial sound recordings and trends in expressive music performance: Why should experimental researchers pay attention?

Dorottya Fabian

> A performance must induce, seduce and surprise, above all, it must be vivid.
> (Leonhardt 1986, p.80)
>
> When we emphasize one specific aspect, another specific aspect is weakened until it disappears. We do not just have more and more expression.
> (Harnoncourt in *Podiumsdisskussion* 1981/1978, p.196)
>
> The musical score is never identical with the work; devotion to the text means the constant effort to grasp that which it hides. … and interpretation which does not bother about the music's meaning on the assumption that it will reveal itself of its own accord will inevitably be false since it fails to see that the meaning is always constituting itself anew.
> (Adorno 1981/1951, p.144)

Introduction

The musicological study of past performances of western classical music have gained exceptional momentum during the last two decades or so due to rapid developments of enabling technologies and the gradual scholarly acceptance of sound recordings as admissible evidence. The CD reissues of old recordings made an enormous repertoire readily available. For the first time in the history of music we have aural evidence of performing styles covering a period of more than a hundred years. And this evidence questions several widely held normative views about aesthetics and interpretative traditions. In this chapter I will summarize what I consider some of the most important results of this recent musicological research as they pertain to the study of expressiveness in music performance. My aim is to highlight information that experimental researchers may find worthy of further study and testing. Below I summarize briefly some of the main trends identified by close analysis of commercial sound recordings. Following this introduction I will provide an historical perspective on performance goals and exemplify the manifestations of aesthetic principles by referring to recordings of J.S. Bach's compositions and nineteenth-century music, concluding with implications for experimental and psychological studies of expressive music performance.

Intensive research of recorded performances has identified a number of trends associated with particular eras, generations, geographic locations or groups of

musicians and schools. For instance, extensive tempo and timing data collected from 52 versions of a Chopin mazurka (Op. 63 no. 3) spanning the course of the twentieth century found that only pianists in the 1950s-1970s and from a Russian tradition manifested the properly coordinated phrase-arch model of expressive performance, thought to be a general phenomenon, where the performer speeds up towards the middle of a phrase and tapers off both dynamics and tempo towards the end (Cook 2009, 2010; cf. chapter 14 by Friberg and Bisesi in this volume). A different study, covering more recordings, this time of symphonies, found that the even, steady tempo for both the first and second subject material of an opening movement was a feature of performance introduced not by Toscanini, as many would believe but by Karajan post 1945 (Bowen 1996). Differences in orchestral timbres and approaches to repertoire across Russian, French, German and US orchestras during the first half of the twentieth century have also been demonstrated (Philip 1992, 2003). Another important trend observed by many researchers working with diverse repertoires is the decline in using portamento (sliding between notes) among singers and string players for expressive purposes by the middle of the century and a concurrent change in vibrato practices, making it more continuous and uniform in terms of its speed and depth (e.g. Leech-Wilkinson 2009a; Katz 2004; Potter 2006; Timmers 2007).

There is general agreement that musicians recording prior to the 1930s or 1940s sound freer, more ad hoc and often extreme in their gestures and liberties with rhythm, tempo, dynamics and timbre compared to the performances of subsequent generations. The most common explanation identifies the demands of the recording industry for precision and repeatability as the primary cause for this development (e.g. Day 2000; Philip 2003). Additional arguments link the phenomenon to broader cultural trends, like modernism (Taruskin 1995) or profound changes in the psyche of post-war Europeans (Leech-Wilkinson 2009b).[1] It is acknowledged that expressiveness in post 1950s performances is more subtle and reserved; it lies in fine nuance rather than flamboyant and idiosyncratic mannerisms. These less obvious, micro variations in expressivity have also been mapped, although primarily in the specific domain of nineteenth-century piano repertoire (e.g. Repp 1992a-b, 1999).

Since the 1960s and 1970s, an alternative performance style has developed, the aim of which is to reconstruct the documented practices of past eras through the use of period instruments and other historical sources. It is not an issue here whether such

[1] The pioneer Austrian conductor and cellist Nikolaus Harnoncourt (b. 1929) identified Hungarian émigré conductors returning from the US after the war as responsible for the lost flexibility and increasing uniformity and precision. He mentioned George Szell by name, but Fritz Reiner may also come to mind. He also noted that for him "Kleiber" is Erich Kleiber (1890-1956) *not* his son, Carlos (1930-2004), who has enjoyed legendary status since the 1970s. BBC Radio 3, Interview by Suzie Klein, aired on 14 April 2012, accessed on 18 April 2012: http://www.bbc.co.uk/programmes/b01g4sbz.

an aim is realistic or what it might achieve. What is important to note is that the differences and similarities between the historically informed performance (HIP) and mainstream (MS) approaches have been extensively theorized by musicologists (e.g. Taruskin 1995; Butt 2002; Haynes 2007) but rarely studied by music psychologists even though some systematically gathered analytical data are available for testing the performed and/or perceived differences (e.g. Fabian 2003; Fabian and Schubert 2008; Ornoy 2009). The more recent, post 1990s trend circling towards greater flexibility and bolder individualism, at least in solo instrumental performances, has received less attention (Fabian 2006a, forthcoming; Sung & Fabian 2011).

This growing body of research has important implications for cognitive and music information retrieval scientists interested in modelling the expressive functions of instrumental and vocal performance. If historical research of written and aural documents indicates constantly changing aesthetic sensibilities and priorities then it is doubtful whether general, underlying rules of expressive performance exist beyond a particular time and place. Therefore, my aim in this chapter is to describe in some detail the musicological understanding of historical changes in performing conventions and the respective characteristics of various stages and periods to foster renewed interest in exploring empirically the qualitative differences among the various trends and practices or, perhaps more importantly, to encourage the designing of experiments that somewhat overcome cultural bias to genuinely probe underlying regularities.

Historical perspectives on musicians' goals in performance

Contrary to much empirically driven research that explains performance expression by highlighting its relationship to compositional structure and thus sees the effectiveness of an interpretation in the performer's ability to bring out the structure (Clarke 1985, 1988, 1995; Palmer 1989, 1997; see also chapter 14), most performers of Western classical music would say that their goal is to communicate the composer's intentions to the audience in a convincing way.[2] This rather vague goal of potentially mythical requirement that musicians, if pressed, tend to elucidate through metaphors (cf. chapters 2 and 3), generally entails playing the prescribed pitches and rhythm, observing notated dynamic and other performance markings, if any, and taking cues from the harmonic and melodic content, as well as general knowledge of the genre, the compositional style, and the composer's era and

[2] There is evidence that such notions were expressed already in the 18th century, if not earlier. For instance Joseph Joachim Quantz (1752) insists that performers should 'always assume the sentiment of the composer, and seek to express it' because 'only in this manner will he do justice to the intentions of the composer, and to the ideas that he had in mind when he wrote the piece' (Engl. Trans., pp. 231, 125).

documented practices. Importantly, it also implies that the performer is somehow to intuit the intended 'spirit' of the composition and communicate its 'meaning'. What each generation has meant by serving the composer's intention appears, however, to be often vastly different, as I will exemplify below.

Up until about 1800 it was customary for the composer to be the performer as well or to be present and involved in the performance, directing and playing in the ensemble. Under these conditions the score had a lesser function since the composer could verbally instruct the performers of any additional requirements beyond pitch and rhythm and players were used to the conventions and practices of their own time and place. As the roles of performer and composer have gradually separated, more and more published accounts appeared providing advice on the 'true' or 'correct' ways to perform. These historical treatises and instrumental tutors are essential resources for later generations interested in recreating past performing conventions (Lawson and Stowell 1999). However, even a cursory look at them alerts the reader to contradictions and different opinions. Furthermore, the verbal expressions (just like the notated scores) are inevitably understood subjectively; each reader-musician bringing his or her personal, cultural, historical position to bear upon the perceived meaning of the text. Even though people at the beginning of the twenty-first century are made well aware of this necessary subjectivity, it is not until one is confronted with the evidence of sound recordings that the magnitude of the problem is fully appreciated. The aural documents can be studied side by side with written sources, sometimes stemming from the same person (cf. chapter 6). The words and explanations may gain a different meaning when one listens to their assumed manifestation in a recorded performance. Importantly, although most artists of the last 100 years at least avow aiming to serve the composer's intentions and to render the spirit of the work so that it appeals to contemporaneous audiences, the interpretations of different generations are often vastly different. This can be very well illustrated by briefly looking at the history of performing Johann Sebastian Bach's music (for more detail see, for instance, Butt 1991, 1997; Fabian 2003, 2005).

Expressiveness in recorded Bach performance

During the nineteenth century and well into the first half of the twentieth, Bach was regarded as the fountainhead of German music, a serious and monumental figure revered for his fugues and religious compositions. Being an organist, people tended to believe that all his fugal works should be performed as if played on the organ according to nineteenth-century melodically orientated aesthetic principles. Famously, Bach's longest fugues are written for solo violin, an instrument on which it is difficult to play more than two notes simultaneously. George Bernard Shaw (1856-

1950) noted this on the pages of *The Star* in 1890 when reviewing a performance by the most highly respected violinist and Bach interpreter of the nineteenth century, Joseph Joachim (1831-1907).

> Joachim played Bach's sonata in C [BWV 1005] at the Bach choir Concert at St James's Hall on Tuesday. The second movement of that work is a fugue some three or four hundred bars long. Of course you cannot really play a fugue in three continuous parts on the violin; but by dint of double stopping and dodging from one part to another, you can evoke a hideous ghost of a fugue that will pass current if guaranteed by Bach and Joachim. That was what happened on Tuesday. Joachim scraped away frantically, making a sound after which an attempt to grate a nutmeg effectively on a boot sole would have been as the strain of an Eolian harp. The notes which were musical enough to have any discernible pitch at all were mostly out of tune. It was horrible – damnable! (Shaw 1981, Vol.1, pp.933-4)

Others have also recognized the difficulty. Yet they were so convinced of their view that these fugues should sound as if played on an organ where each note is easily sustained to its full length that an entirely concocted theory was allowed to emerge and gain currency. Albert Schweitzer (1875-1965) together with Arnold Schering (1877-1941) promoted the idea that a special curved bow must have existed and used in Bach's circle (Schweitzer 1950). Upon the instigation of Schweitzer and Hungarian violinist Emil Telmányi (1892-1988), the Danish bow maker, Knud Verstergaard created such a bow (hence the alternative name: Vega bow). It had a lever that relaxed the hair so that it could touch all four strings at once. Telmányi used the bow whenever he performed the pieces, recording the complete set (BWV 1001-1006) with it in 1954. The sound (audio ex. 4.1) created is reminiscent of a synthesizer and the musical character can be described as fairly unrelenting and intense (see more discussion at Figure 4.1a). There was no historical evidence for the existence of such a bow and researchers clarified this during the early 1960s (e.g. Boyden 1965). Nevertheless a new recording with such a bow was made in 1998 by Rudolf Gähler who also published a book about it (Gähler 1997).

Holding each note to its full written value and creating a continuous sound fit well with the fundamental view of Bach as the intellectual composer, the ultimate craftsman of polyphony and a source for learning appropriate voice-leading and harmonic progression procedures. This opinion dominated Bach reception much beyond the tenure of the discredited curved Bach-bow. Recordings of his music from the 1940s to the 1980s (e.g. Menuhin, Heifetz, Milstein, Szeryng, Szigeti, Ricci, Kremer, Perlman, etc.), as well as earlier and later decades, point up a style that has an aura of seriousness, of grandeur (Fabian 2003, 2005). Tempi are fairly slow, tone

full bodied and intense, all notes are played with equal weight in a sustained legato or evenly detached manner. Slow movements are often emotionalized through particularly notable vibrato and an emphasis on melodic climaxes achieved by creating longer lines of increasing dynamics and then fading away into pianissimo. Dance movements are treated with similar seriousness hiding their rhythmic character and apparently aiming simply to create a beautiful, sustained tone. The fast movements are approached as virtuosic show pieces in continuous motion with occasional echo dynamics as Bach's autograph manuscript prescribes. Listening to these recordings made by the greatest names of the century one can hear the concurrent musicological opinion regarding the characteristics of the baroque style manifest in sound. According to Edward T. Cone (1968, p.58) baroque music, '[c]ertainly the style of […] the age of Bach and Handel, is most memorably characterized by an important rhythmic feature: the uniformity of its metrical pulse'.[3] Performances that interpret faster movements as if they have a 'uniformity of metrical pulse' have been famously described as representative of the 'sewing-machine style' (Dreyfus 1983; see longer quote below); a style epitomized by the *Switched on Bach* album released by Columbia Masterworks Records in 1968. Key early protagonists of the early music movement reacted against this style. For instance Nikolaus Harnoncourt recalled in an interview that already as a 'cello student he wanted to know why old music sounded so boring. He found it incomprehensible what kind of satisfaction a musician could gain when the kilometres of baroque music notated exclusively in semiquavers were merely reeled off' (Harnoncourt 1980, p.32; my translation).

The case of the slow movements is different. When asked, today's listeners may describe these recorded performances as expressive or beautiful but often associate the playing either with a 'modern' or with a 'romantic' approach, depending on the kind of expressiveness the performer adopts. The former tends to sound squarer and emotionally detached whereas the latter tends to be slower, the tone more intense, with legato and vibrato and more emphasis on long melody lines, and may include a few portamenti. These characteristics can be seen from spectrographic visualisations of sound files (audio exs. 4.2-4.7). Figure 4.1 shows six versions of bars 1-3.5 from the Sarabanda movement of Bach's *D minor Partita for solo violin* (BWV 1004): one with the curved bow (Gähler 1998); three romantic (Heifetz 1952, Huberman 1942, Menuhin 1934), one mainstream (Grumiaux 1961) and a historically informed version with a baroque bow and violin (Luca 1976).

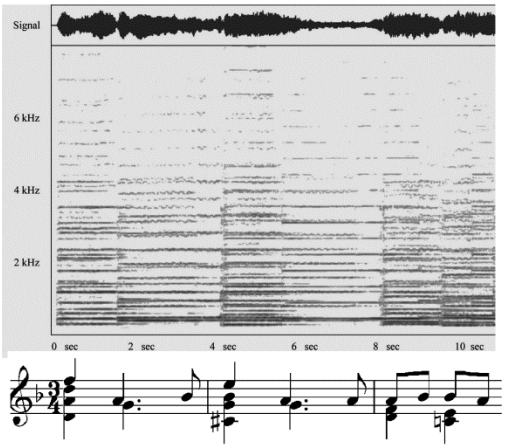
[3] Cone's view will be further discussed below where its significance for performance expression will be explained.

Inspection of these images (together with listening to the somewhat longer audio files) reveals several features.[4]

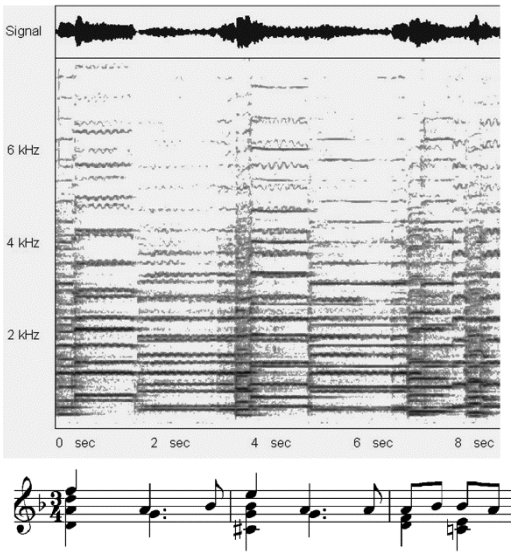
1. Due to the curved bow Gähler can play the opening chords without breaking the notes: compare the four straight vertical lines marking the onset of the first and second beats of bars 1-2 in Fig. 4.1a with the shorter extra (often 'fuzzy') sections preceding these beats in the other images (Fig. 4.1b-4.1e).
2. Huberman slides up to the top F of the opening chord from the initial lower two notes (chord-break): note the slightly angled connecting line, best seen at the upper harmonics of the first main note (around 0.5 sec).
3. Grumiaux's chord breaking is faster, less broken than Menuhin's, probably aiming to make it sound like a chord.
4. Luca does not break the chords but plays them arpeggio: see the gradual building up of partials and the lack of straight vertical lines at notes 1 and 3 (at 0 sec and just before 5 sec), meaning that there was a delay in note onset from the second from-bottom through to the top note of the chord, relative to the bottom note.

[4] The spectrograms shown in this chapter are unedited images (using the 'save screen image; current window' function) generated in Spectrogram14, which shows no tick marks for axis labels, but allows direct reading of values from the plots via point and click, which is how all spectrogram readings were made and reported in this chapter. The following settings were used: Frequency scale: linear; FFT Size (points): 4096; High Band Limit: 8000Hz; Frequency resolution: 16 Hz; Sample Size (Bits): 16; Window display: 13.6 seconds; Sample Rate: 44100Hz; Spectrum Level: -80dB.

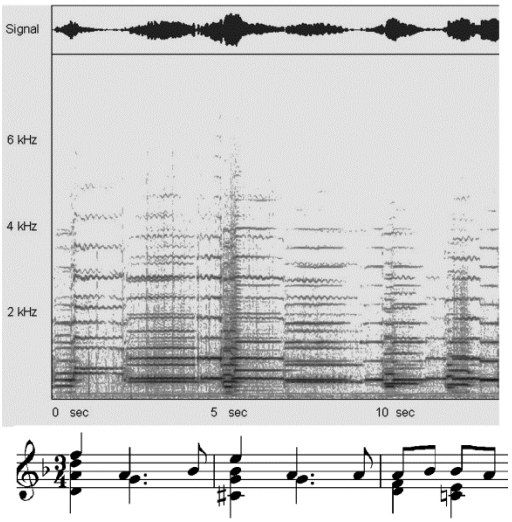
Figure 1: Spectrograms of 6 recordings of Bach's D minor Sarabanda bb.1-3 audio exs. 4.2-4.7



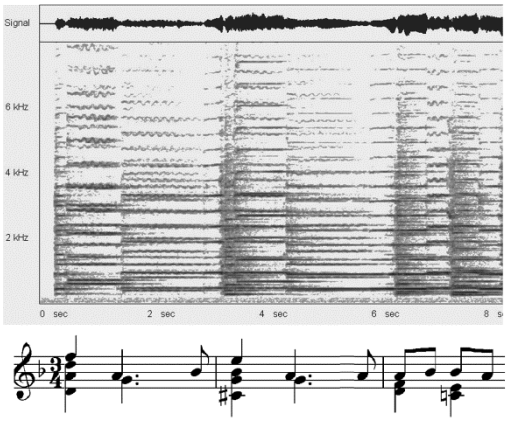
1a: Gähler (1998)



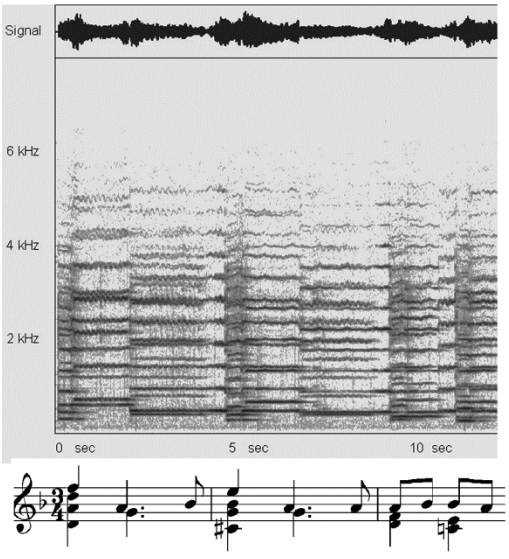
1d: Heifetz (1952)



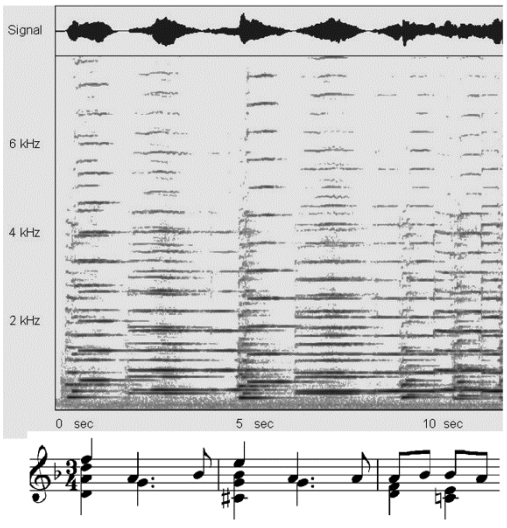
1b: Huberman (1942)



1e: Grumiaux (1961)



1c: Menuhin (1934)



1f: Luca (1976)

5. Bowing is sustained in all but Luca's performance: note the even strengths of the horizontal lines from one note onset (vertical line) to the other compared to the lighter and more arch-like shape of Luca's bow strokes. The gradual uptake and quick decay of upper partials that create the arch shape capture the characteristics of a baroque bow: it is shorter and less evenly balanced than the modern bow. HIP players have learnt to utilize this 'bouncy' characteristic of the period bow and claim it to be crucial for recreating baroque performing conventions (Lawson and Stowell 1999).
6. Differences in vibrato (waviness of the horizontal harmonics) practice can also be observed. Playing chords, Gähler's vibrato is somewhat covered up by the presence of open strings but it seems fairly well regulated, even and quite narrow. Heifetz's vibrato is even and fairly narrow. Menuhin's vibrato is faster and its depth greater. His tone also seems quite intense for the shade/saturation of the signal is indicative of amplitude (darker being louder) and his quavers at the end of bars are easy to spot due to their black colour and deep-fast vibrato (see ca. 4.3 sec). Huberman's and Grumiaux's vibrato seems less even, especially in terms of depth that changes according to the shape of dynamics. Compared to these 'romantic' and 'modern' mainstream versions, Luca's HIP approach results in little vibrato, often just a short quiver in the middle of a longer note, varying the timbre of the tone.
7. Tempo differences can be deduced from the duration of the excerpts. Each shows the first eight beats of the Sarabanda. Heifetz and Grumiaux play faster than the others.

Listeners hear these differences and their comments reflect their taste as well as their level of familiarity with this repertoire. Apart from quick internet searches of listeners' reviews on websites like youtube or amazon.com, this can be seen in experimentally gathered data as well. In a listening study conducted at the University of New South Wales in 2006-7 participants made the following comments on recordings of Bach's D minor Sarabanda by Grumiaux (1961): 'A very powerful and energetic performance'; 'Very fast performance, not very emotionally expressive. A bit 'angry' sounding, but rushed'; 'The performance was not very expressive'; 'A bit square, strident, savage, even, for a sarabande'; 'This sounds particularly modern … the performer seems less emotionally involved.' Of Heifetz's version (1952) they opined, 'Quite emotionally expressive with a lot of vibrato'; 'Sounds romantic';

'Beauty of tone dominates over style'; 'Lots of vibrato makes this performance very expressive'. Comments on Huberman's recording (1942) of the same excerpt included, 'Very romantic interpretation; over-dramatized'; 'This player identifies the affect as gushy sentimental anguish, and uses nineteenth-century expressive style to show this convincingly.' Responses also highlighted personal biases: 'This performance made me laugh. Is this performer making fun of Bach?'; 'This player is probably playing on 20th century gut strings and with antiquated technique. Cool!' Such contrasting opinions were observed in comments on Menuhin's 1934 recording as well: 'A much more laboured performance; quite measured and lacking in expressive and emotional variation and contrast'; 'A beautiful dull performance from the time when beauty of tone and a nice melody seemed to be all that mattered'; 'A bit slow and not interesting enough in terms of phrasing and flexibility of tempo'. But: 'I enjoyed this performance. It was expressive, but not extremely so'.

Professional critics may also express opposing verdicts indicating the subjective nature of aesthetic judgements (cf. chapter 2). The case of Heifetz is notorious for polarizing opinion, many upholding him as the greatest violinist of the century while others finding his playing too impersonal and cold. The following two citations from reviews of Heiftez's solo Bach recording made in 1952 hint at this tension and point to the elusive nature of perceived expressiveness and a lack of 'objective' criteria and justification in music criticism.

> At times one feels that Heifetz's instrumental perfection is acting against the expressive potential of the music... [Although] magnificent, ... the Chaconne is treated more as a *romantic vehicle for selfexpression* [*sic*]. (James Methuen-Campbell, *Gramophone* 66/784, p. 443; emphasis added)

> A deeply personal vision is not the only route to elicit the meaning in music. Take Heifetz's forthright Bach solo sonatas, which succeed precisely because their direct simplicity focuses attention on the purity of Bach's conception. His approach *honors the music, not the interpreter*. (Peter Gutman, http://www.classicalnotes.net/columns/heifetz.html; italics added)

The observed differences between the visualized sound of Luca's performance and those of the others capture the late twentieth century trend in Bach performance practice. While the

'serious, intellectual and contemplative' Bach-view of the nineteenth century was gradually giving way to the modernist mid-twentieth-century view that treated his music just as any other composition from the German baroque, the historically informed performance (HIP) movement was also gathering ground.[5] During the 1950s and 1960s there was little difference between performances claiming to be historically informed (i.e. attempting to re-create eighteenth-century performing conventions and practices) and the 'modernist' or mainstream (MS) style. Both tended to sound mechanical, even, literal and depersonalized as illustrated by Cone's definition of baroque musical characteristics (Cone 1968) and the opinions on Grumiaux's recording cited above. The overall change in sensibility from that of the pre-war era is vividly captured by Dreyfus (1983, p.303):

> This was the period of the 'sewing machine' style … when … orchestras enthusiastically took up 'terraced dynamics', when … conductors urged players to stop 'phrasing', and when repeat signs in the music occasioned a blaze of premeditated embellishments. 'Motoric rhythms', it seemed, revealed a new species of musical gratification – the freedom from feeling. 'Let the music speak for itself' was the battle cry. In practice: substitute brittle harpsichords for grandiloquent Steinways, pure Baroque organs for lush Romantic ones, cherubic choirboys for wobbly *prime donne*, intimate ensembles for overblown orchestras, the *Urtext* for doctored editions, then one is true to Bach (or whomever) and his intentions. The musical results of this early purism were … sterile.

By the late 1970s but especially the mid 1990s, however, the HIP movement had developed a recognizably different sound based on radically different playing techniques and approaches to rhythm, pulse, articulation and phrasing. Accordingly the opinion regarding what might be deemed an expressive performance of Bach's music has changed significantly yet again.

As mentioned earlier, analytical musicologists of the 1960s considered the 'uniformity of metrical pulse' a key characteristic of late baroque music (Cone 1968, p.58). Although Cone

[5] The perceived 'devaluation' of Bach to just another German baroque composer was famously captured by Adorno's phrase coined in the early 1950s: 'They say Bach, but mean Telemann' (1981/1951, p. 136).

also discussed metrical hierarchy and metrical ambiguities that are 'used to advantage to offset the otherwise unrelieved squareness' (p.66), he concluded that '[i]n performance, the result should be a *relative equalization* of the beats' and recommended that the performer's 'orientation within the measure should be effected more by the actual musical profile than by applied accentuation (which, after all, was unavailable on two of Bach's favourite instruments). The metrical ambiguities and shifts can thus express themselves naturally in accordance with the varying rhythmic context' (p.70, italics added).

In the evidence of sound recordings this 'natural' expression of metrical ambiguities did not happen until the regularity of the beat was de-emphasized and the focus was directed towards the importance of metrical hierarchies. This difference in emphasis creates the essential distinction between HIP and MS approaches in performing baroque music.

Contrary to Cone's focus on the regularity and uniformity of tempo and meter, music historical research now emphasizes the diverse range and hierarchy of metric stress in baroque music (e.g. Houle 1987). Current HIP ideology (based on seventeenth- and eighteenth-century sources) advocates for strongly rhythmicized, locally nuanced interpretations where the dance element of much baroque music is highlighted through prominent projection of pulse and clearly defined articulation of short metric-melodic-harmonic units; where the 'speaking' (rather than 'singing') quality of the music is pointed up by emphasizing musical gestures of a bar or metric unit length; and where the underlying harmony rather than an imagined long melodic line governs phrasing. The end result tends to have the character of 'vivacious playfulness' rather than 'serious intellectualism'. In violin playing the effect is achieved by shorter, lifted and uneven bow strokes that allow a quicker decay of sound and thus create an airier character (Figure 4.1f). Listeners in the above mentioned study made the following comments on such HIP interpretations of the Sarabanda from Bach's *D minor Partita for solo violin* by Sergiu Luca and Monica Huggett:

> Luca's recording: Very serene, as only a vibrato-less performance can convey; I like the sincerity and clarity of this - less overtly emotional but still highly expressive; I would call this recording 'refreshing' i.e. it is refreshing to hear such a vibrant performance - conjures fresh, new images of a period often associated with 'plod'!

> Huggett's version (audio example 4.8): Phrases were fairly short. Performance was not very 'emotional'; the performer allows breathing and small variations within the beat. It makes it expressive without being overly expressive; the flexibility in the beat structure of this excerpt contributed greatly to the emotion of the work. It allowed the performance to guide the listener to more introspective feelings.

Even though this brief overview of the recorded history of Bach's solo violin works clearly chronicles major changes in aesthetic sensibilities and the stylistic manifestation of expressiveness in musical performance, the objection could be made that Baroque music is somehow special in that regard while the performance of music composed since about 1820 has changed much less, if at all. The evidence of sound recordings does not support such an argument (cf. chapter 6). Similar variety of approaches to performance can be observed in later repertoires as well.

Expressiveness in Nineteenth-century repertoire

Repp studied timing micro-variations in performances of Chopin's *Etude in E Major* Op. 10 no. 3 (Repp 1998) and Schumann's *Träumerei* (Repp 1992a-b). The Chopin study examined the first five bars in 115 commercial recordings made between approximately 1927 and 1994. Principal components analysis identified four main independent timing strategies and pianists used these in a wide variety of combinations. Their choice of basic tempo as well as tempo modulation was also found largely idiosyncratic. The results showed that 'no two individual patterns were exactly the same' and Repp was hard pressed to explain the possible reasons for the individual differences or to find links between these variables and the artists' socio-cultural background (1998, p.1085). However, Repp stressed that this seemingly infinite variety of timing at the micro level may disappear at the macro level because performers tend to slow down at larger structural points. The more frequent such boundaries are in a piece, the more similar performances (i.e. the timing patterns) of different artists will become (p.1086). This is important to note in relation to the criticism mentioned earlier in the chapter regarding performances becoming more uniform as the twentieth century progresses; perhaps the compositional nature of the repertoire has a contributing effect as well. Several other empirical studies also show that at the micro level there still is enormous variety. Timmers and colleagues (2000) have actually argued that

expressive variation seems to diversify with increasing textural-structural complexity as more options become available to the performer. Therefore it is paramount that both the musical context of expressive deviations and the parameters of performance criticism are carefully delineated in making claims regarding trends.

Repp's *Träumerei* papers (1992a-b) analysed 28 commercial recordings representing 24 'famous pianists' (names provided in Repp 1992b, Table 1). Repp found that timing deviations from the score (inter-onset-intervals of quaver notes over time) tended to create a concave shape in the recurring melody of Schumann's piece. These timing profiles were 'reminiscent of the parabolic curves hypothesized by Todd (1985) as the basic phrasal timing pattern' and reflected the 'general principle formalized by Todd and observed by many others, that there is a slowing of the tempo at major structural boundaries, in proportion to the importance of the boundaries' (Repp 1992b, p.2553). Repp proposed that classes of optimal shapes for melodic gestures exist that provide 'flexible constraints within which artistic freedom and individual preference can manifest themselves' (1992a, p.221). Importantly he noted exceptions to this typical shaping: The performances of the Brazilian Cristina Ortiz (born 1950) and the Franco-Swiss Alfred Cortot (1877-1962), who was represented by three different versions, did not fit the parabolic pattern. Repp found these interpretations 'mannered' (p.228). His follow up perceptual experiment reported in the same (1992a) paper confirmed that other musically trained listeners also favoured the standard parabolic shaping of musical phrases but uncultivated listeners could not make consistent aesthetic responses. This result hints at the issue of periodic changes in acquired taste and opinion regarding how the music 'should' go; what might be perceived as 'appropriately expressive'.

Since Repp's work, even earlier recordings have become easily available providing insights into how musicians who were born and trained in the nineteenth century played these and other works by the same composers. The *Träumerei* is particularly interesting as its popularity ensured that even string players performed it. For instance Maud Powell (1867-1920), the American violinist recorded it twice (1910, 1915) while there are at least 3 versions (1915, 1926 and 1930) on the market (see Discography) by the Catalan cellist, Pablo Casals (1876-1973). If Repp and his listeners rated Cortot's *Träumerei* low on their scale of preference, they would likely find Powell's version even stranger (not to mention that of

Adelina de Lara (1872-1961) or Fanny Davies, pupils of Clara Schumann whose recordings survive and have been reissued on the Pearl label [GEMM CDS 99049]). Powell uses portamento frequently (there are at least 35 clearly audible slides) and her tempo modulations and timing variations are more extreme than customary today. She tends to hurry smaller rhythmic values and hold on to longer notes. She plays the first half of the main melody faster, with a sense of urgency and then pulls back the tempo during the descending second half while her accompanist speeds up the closing left hand figure that links to the next phrase, 'giving back' the 'robbed' time and returning to the basic tempo for the first two beats of the new phrase (for a history of tempo rubato see Hudson, 1994). Powell particularly rushes ahead at the start of the penultimate phrase (b. 17-24; cf. Fig. 4.3; audio ex. 4.9), animating the modulation. During the final phrase (b. 25-32) she elongates the high note marked by a pause sign and from then on plays noticeably slower to the end (Fig. 4.2; audio ex. 4.16). The graphed comparison of the tempo of Powell's last phrase with four more recent recordings (Barenboim, Kempff, Burnett and Jando) shows her more extreme tempo fluctuation (final ritardando notwithstanding) as well as different phrasing strategy. A further comparison of early and more recent recordings confirms differences in the overall shaping of phrases. Whereas in later recordings tempo fluctuations do result in the (phrase) arch thought to be a general characteristic, in the earlier versions such a pattern is harder to detect. The individual differences are also more pronounced in the early recordings, as can be seen in Figure 4.3[6].

[6] These graphs are not discussed in relation to Repp's (1992) work. He always used duration, rather than tempo. The point that is made here is the difference in approach between turn of the century and more recent musicians to creating an expressive performance of Schumann's *Träumerei*. Discographic details are listed at the end of the chapter.

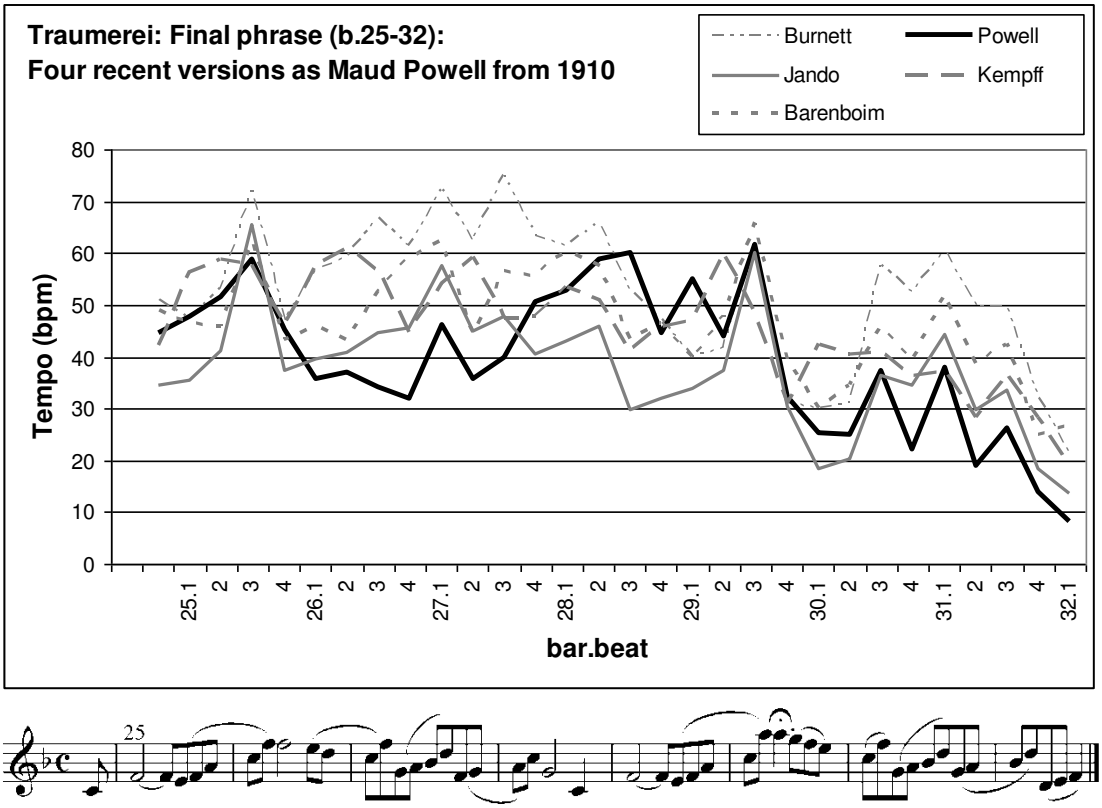
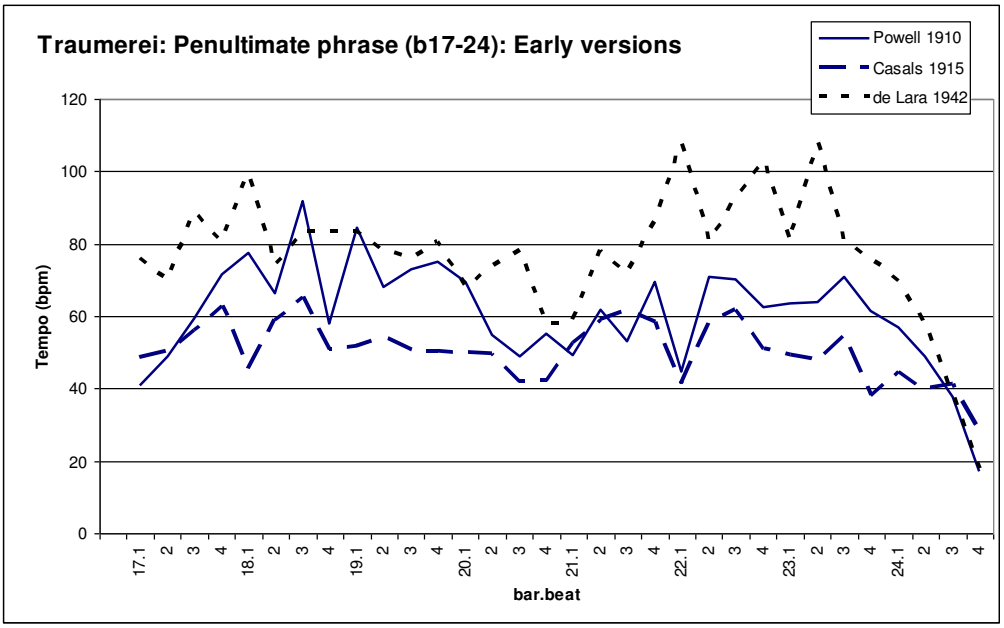
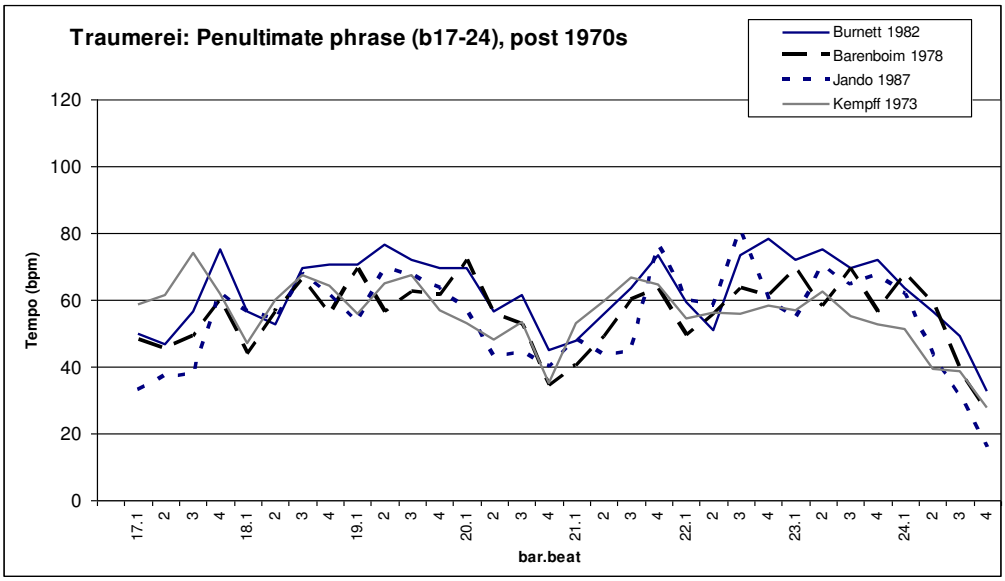


Figure 4.2: Score and graph of tempo fluctuation in Maud Powell's 1910 recording and 4 more recent versions (Kempff, Barenboim, Burnett and Jando) of the final phrase (b. 25-32) in Schumann's *Träumerei* from *Kinderszenen* Op.15 No 7. Tempo was calculated from the interonset interval (IOI) between beats as provided by the piano accompaniment (i.e. the left hand part which continues under the tied or half notes of the melody). Audio exs. 4.16-4.20 [please ensure that the fig. is visible while listening]





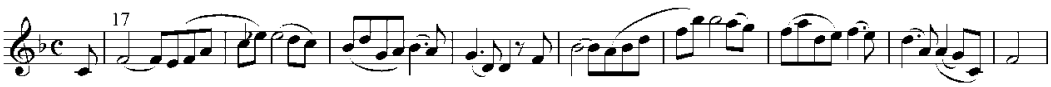


Figure 4.3: Score and comparison of tempo fluctuation (calculated from beat onset times) in 3 early and 4 more recent recordings of the penultimate phrase (b. 17-24) of Schumann's *Träumerei* from *Kinderszenen* Op.15 No 7. Audio exs. 4.9-4.15 [please ensure that the fig. is visible while listening]

In the early versions, one can hear obvious asynchrony between solo and accompaniment as well as within the piano accompaniment itself. Chords are typically played in an arpeggiated fashion and melodic pitches tend to be delayed. These two features are common across a whole variety of repertoire performed by pianists of the nineteenth century who lived long enough to make recordings (see chapter 6) and have been investigated empirically by Goebl and colleagues (2010). Chopin's Nocturne Op. 9 no. 2 in E flat Major is a famous example. As popular as Schumann's *Träumerei*, it survives in many versions, quite a few on the violin (e.g. Sarasate, Drdla, Elman, Heifetz) and cello (e.g. Casals). Again, the most striking aspect of these versions is their wayward tempo that fluctuates liberally not so much across longer phrases but at a more local, bar or pairs of bar level. The nowadays customarily even pulse of Chopin's 9/8 is blurred by arpeggiation, asynchrony and rapid succession of speeding up and suddenly slowing for a single note or beat (ritenuto), with occasional longer deceleration (rallentando) at major structural points. Generational differences can also be gleaned (Fig. 4.4; audio exs. 4.21-4.26): Casals tends to delay the melody while the younger Elman (1891-1967) and Heifetz (1901-1987) show melody lead, thought to be more typical nowadays (cf. chapter 13). These and many more performing conventions are discussed in more detail by Peres Da Costa and Milsom in this volume (chapter 5) and also by Hamilton (2008), Leech-Wilkinson (2009a), Philip (2003), Milsom (2003) and Peres da Costa (2012), among others. What is important to note here is the fact that even such standard repertoire pieces have a stunningly diverse performance history.[7]

[7] Early recordings show that nineteenth-century pianists tended to interpret Mozart's and Beethoven's music in a similar vain (i.e. with arpeggiated chords and asynchrony between hands). As far as more modern repertoire is concerned one could refer to the differences between Bartók's own interpretation of his piano pieces and versions offered by Hungarian pianists who claim familiarity with both Bartók's own playing and the folk music traditions they invoke (e.g. Zoltán Kocsis, András Schiff) to illustrate the overall trajectory of twentieth-century performance from a flexible, gestural, rhythmically subtle playing towards a more literal, controlled and robust expression.

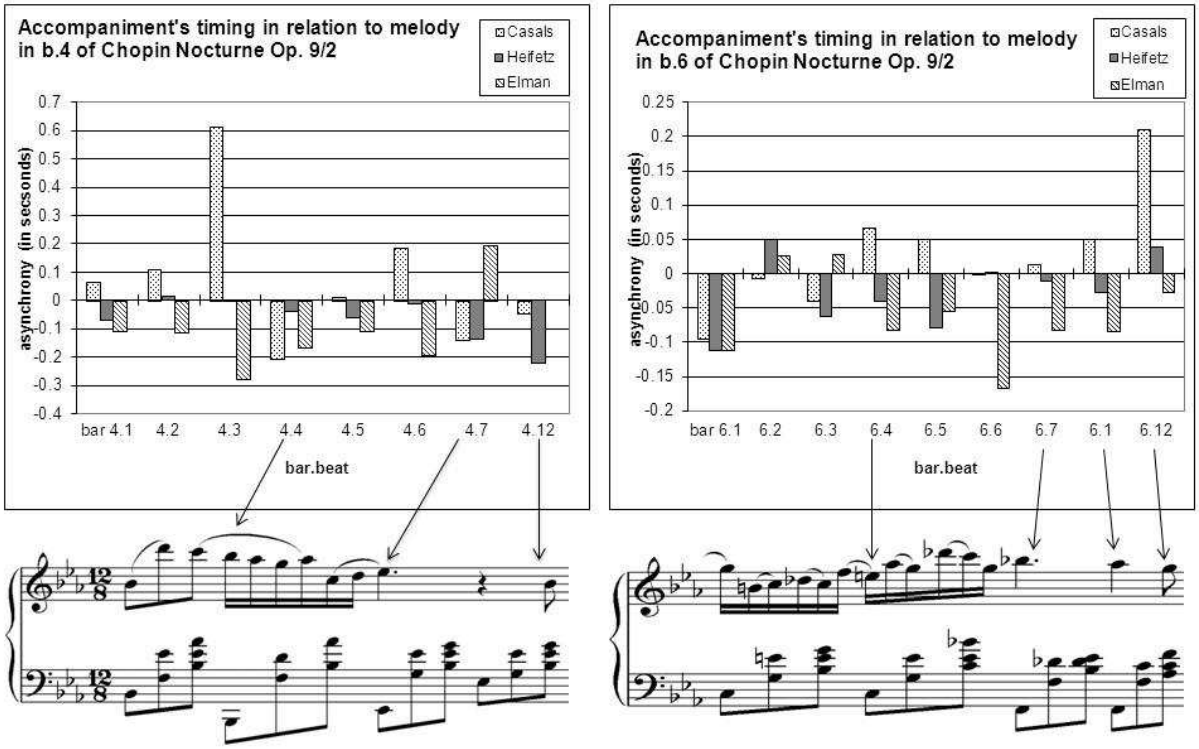


Figure 4.4. Melody delay and anticipation in 3 performances of from Chopin's Nocturne Op. 9 No. 2 in E flat Major (bars 4 and 6). Positive values indicate the piano accompaniment is ahead, i.e. melody delay; negative values indicate melody anticipation (i.e. the accompaniment lags and the melody leads). Asynchrony was calculated by measuring note onsets in *Spectrogram 14* and then subtracting piano onset times from melody onset times. The three performers' average tempo in the first 8 bars of the Nocturne was approximately quaver = 108 for Casals, 95 for Elman and 113 for Heifetz. Casals' tempo was approximately quaver = 105 in bar 4 and 104 in bar 6; Elman's 83 in bar 4 and 79 in bar 6; and Heifetz's 98 in bar 4 and 109 in bar 6.
Audio exs. 4.21-4.26 [please ensure the fig. is visible while listening]

Discussion

How reliable are early recordings in terms of giving us a glimpse into past performing styles? Take the case of Adelina Patti (1843-1919), one of the most celebrated singers of the second half of the nineteenth century whose career started at the age of eight in New York and ended with a final farewell concert in London in 1914.

> To many modern listeners her singing sounds utterly bizarre: the 1905 recording of Mozart's 'Voi che sapete' at the age of 62 (ten years after her Covent Garden farewell performances) features extreme register changes, inaccurate pitching, rampant portamento, and radical tempo changes that are not marked in the score, not to mention appoggiaturas added where not marked and omitted where Mozart notated them. Is this the work of a performer past her prime, or the remains of a dynamic style and technique that may have had its origins a generation or two earlier? (Potter 2006, p.536)

This question is indeed commonly asked when dealing with the earliest acoustic recordings and piano rolls. In Patti's case, however, we have some further, potentially decisive information as John Potter (2006) notes as well: she was extremely pleased with the recording, according to her accompanist, Landon Ronald she 'went into ecstasies' when she heard her voice back: 'Oh my God! Now I understand why I'm Patti. Oh yes! What voice, what artistry! I understand it all!'[8] Our questioning is likely to arise because of our modern expectations of disciplined faithfulness to the letter of the score and a clean technical control. The kind of expressive flexibilities and interpretative liberties we can hear on early recordings may prompt feelings of bewilderment and estrangement even when we have become familiar with it. The glaring rift between our reaction and contemporary accounts – many of these musicians enjoyed the highest regard among their peers as well as critics and audiences – underscores the magnitude of changes in taste and performance style and challenges the validity of simplified models of expressive music performance even within the European classical tradition.

To gain a better sense of the differences between the overall qualities and expressive approaches and also to see the degree to which our verbal descriptions of these old styles might match the likely meaning of historical accounts we can turn to critics, both contemporaneous with the singers and those writing currently.[9] Eduard Hanslick (1825-

[8] My translation of the French original cited in the Liner notes (p. 5) of the CD reissue of Patti's recordings by Symposium Records (Symposium 1324) in 2004: *The Symposium Opera Collection Vol. 14* ['Ah! Mon Diue! Maintenant je comprends pourquoi je suis Patti! Oh, oui! Quelle Voix! Quelle artiste! Je comprends tout!'].

[9] One such systematic study compares contemporary reviews of Joachim, Sarasate and Ÿsaye with an analysis of their surviving recordings (Fabian 2006b). The study found several concordances: assessment of choice of

1904), the revered Viennese critic of the nineteenth-century, provides a useful description of Patti's performances. Some of his observations are clearly audible on the mentioned recording: 'her singing is always clean, always in tempo, she respects the composer's notes, she vibrates rarely; metrically always strong but treating the rhythm within the beat with individual freedom, nothing is dragged or rushed, yet everything is *animated* even the softest vibrations of tone.' He also praises Patti for the 'lightning fast high staccatos, trilling on a note for 17 bars on a single breath, the varied shading and colouring of her voice, the ease with which her light and silvery voice controls the high registers', and repeatedly for the 'naturalness and directness' of her 'tasteful' singing and 'impeccable intonation' (Hanslick 1885, pp.35-36, 43, 32-33, my translations, italics added).

In contrast, the new style of singing is described by Potter (2006) as being more text-driven, the expression aiming to reflect the words through variation in vocal timbre. Potter identifies Dietrich Fischer-Dieskau (1925-2012) as pivotal in terms of radical changes in vocal styles. Of his 1948 recording of Schubert's Ständchen from *Schwannengäsang* Potter writes:

> It is the performance of a singing actor in which consistency of tone is replaced by wide variations in vocal colour together with extreme dynamic range from full voice to an intense *mezza voce.* He sings a truly 'bel canto' legato line only once … The text is articulated with great clarity and with little thought for the traditional smoothness of line… This is a remarkable performance that records a radical change in singing style. (p.545)

Leech-Wilkinson agrees, adding Elisabeth Schwarzkopf (1915-2006) and Maria Callas (1923-1977) as key artists establishing the modern style. He notes that the 'reaction against subjectivity' heard in the singing of these artists manifested in a move 'away from portamento and rubato' towards a 'much heavier vibrato'.

> A permanent wider and slower vibrato applies now to everything, regardless of the changing musical surface, as if its width and speed could signal feeling in the

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tempo (what was criticised for being excessively fast, sounds so even today), descriptors of violin tone (in spite of the limited sound quality), use of vibrato, and overall interpretative approach.

abstract while its regularity could guard against feeling in the moment (2009b, pp.252-3).

Although a cursory familiarity with the enormously large body of recordings seems to support these summary statements, the findings of the few analytically detailed empirical studies throw caution in the air; the individual and repertoire specific differences identified by these investigations imply that generalizations about trends may be true only at a very broad, bird's eye view level (e.g. Turner 2004, 2007; Dahl 2007). The data are often so diverse that the results can be interpreted and presented in many different ways to support a variety of arguments.

There is also the scarcely investigated issue of artistic temperament reflecting personality types. There are performers who speak up for subjectivity and intuition in interpretations. Others prefer a conscious-analytical approach (Bangert 2012). Some tend to play everything fast or slow; others seem to favour extremes and take fast movements very fast and slow movements rather languidly (for such data in Bach repertoire see Fabian 2003). I am unaware of systematic, controlled investigations of the impact of personality type on individual performance style and expression, yet it seems highly relevant, impacting on the clarity of possible overarching trends.[10] If 'expressive behaviour is considered to be a key element in understanding personality and individual differences' (Luck et al 2010, p.714), then the reverse must be true as well: personality must influence expressive behaviour. The mentioned individual tendencies can be clearly observed with the help of sound recordings. Moreover, historical sources indicate that these differences existed in earlier times as well. Bowen (1993) traced the approaches of conductors since the beginning of the nineteenth century and was able to identify a 'subjective' and an 'objective' lineage, including specific performance characteristics. Carruthers (1992) conducted a similar study with nineteenth-century pianists and found the same. One can also encounter seventeenth- and eighteenth-

[10] Individuality in performance is studied by various researchers, especially through data mining (e.g. Madsen and Widmer 2006; Stamatatos and Widmer 2004) but these do not link differences to personality types but are interested rather in how recognizable the performers are. Luck and colleagues (2010) investigated the influence of the Big Five personality traits (Costa and McCrae 1992) on *listeners*' movements to various types of music. It is of course difficult and largely impossible to obtain Big Five Inventory data on internationally known commercial artists, especially those of past eras. Still, archival records such as interview data could be scrutinised for hints at personality traits and then compared with artistic choices and expression.

century sources complaining about ‘the wretched performer who only plays the notes’ or conversely, ‘the wretched performer’ who doesn’t honour the composer’s score but indulges in fanciful alterations and liberties (e.g. Wolff 1998, pp.338-353; Lawson & Stowell 1999). All this seems to lend support to Nicholas Cook’s view that we have insufficient ‘empirical data to justify the belief that there is such a thing as [period] “performance style”, rather than a complex pattern of interlocking interpretive practices that may be not just heterogeneous but quite different in music belonging to different genres or performed by different instrumental or vocal forces’ (Cook 2010, p.13).

Conclusions

When discussing musical performance, writers often seem to emphasize the importance of bringing out the musical (i.e. compositional) structure (e.g. Clarke online). Empirical researchers highlight the link between tempo and dynamic changes and phrase boundaries, or the timing of notes and metric or harmonic structure. Surely the ebb and flow of much tonal music is embedded in its motivic, metric and harmonic architecture and a performance that reflects these will likely make the music more intelligible for the listener. Yet a performer may strive to create long phrases or to focus on local detail and when asked often refers to intuiting the composer’s intentions, communicating the ‘dramatic narrative’ (Schmalfeldt 1985), or the musical character of the piece. Has structure always been in the forefront of Western classical performers’ approach to music? — If early recordings of old nineteenth-century artists are indicative at all, then perhaps not (cf. chapters 1 and 2). A more personal, intimate, direct approach to line, notes, bars, harmonies, texts, words can be heard in recordings by Patti, Joachim, Reinecke (1824-1910) and others. The current focus on structure may be a result of twentieth-century modernist structuralism and an emphasis on music analysis. The latter provided usable theories for how Western tonal music works – conveniently disregarding historical style periods with distinctive aesthetic ideals. But the evidence of sound recordings spanning over a hundred years calls for caution and a reconsideration of assumptions even within the confines of the Western tonal literate tradition (cf. chapter 1). The role of enculturation is clearly evident, any model or theory would need to account for it (cf. chapter 14).

Early recordings indicate that the layer of musical structure performers may intend to highlight changes with historical periods and also repertoire. Musicians born late in the nineteenth century tended to blur over cadence points to project a never-ending melody line while at the same time employed localised rubato to highlight special moments of tension or relaxation. Earlier performers seemed to focus more on showing moment to moment details of the music. Pointing up the large-scale architecture became common around the middle of the twentieth century; at a time when music analysis gained ground and promoted an emphasis on musical structure (probably reflecting the impact of modernism and structuralism, two influential ideologies of recent times). The overview of the history of Bach reception and performance outlined the influence of reigning dogmas on what may be regarded appropriate expression and communication of the assumed intentions of the composer at any particular time. The findings of Timmers (2007, p.85), such as 'the relative absence of significant relationships with phrase structure, [and] the local lengthening of moment of high tension' challenged, at least partially, existing views of expressive music performance (e.g. Todd 1985, 1992). At the same time, the strong correlation she found between melodic contour and dynamics supported the very same theories, at least in nineteenth-century repertoire. More such research needs to be completed, and using the widest possible range of compositions, before it is possible to speculate about the implications.

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