

# A Taxonomical Framework for Evaluating Piano Performances



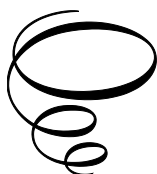
# A Taxonomical Framework for Evaluating Piano Performances:

*Tempo Styles beyond Fast  
and Slow*

By

Danny Zhou

**Cambridge  
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## PREFACE

My personal interest in studying performance of classical music began in my teenage years. At the age of 16, I presented a programme for Radio Television Hong Kong (RTHK) Radio 4, introducing and comparing recordings of Chopin's Etudes. My formal training in musical performance research commenced when I pursued my MPhil degree at the University of Cambridge. My research investigated how pianists articulate and create formal structures of Chopin's "Black Key" Etude. With a burning desire to better understand performance style, I have never ceased my ever-deepening research into recordings, performers, and a variety of performance features over the years.

However, having transitioned from a music aficionado to a musicologist, I gradually realised that my research has been of limited practical significance and that music researchers, music performers, and music lovers have tended to speak different languages and have different ways of thinking about music. Researchers examine the ratio of dotted notes in Bach's French overtures and the tempo-dynamic correlation of phrase arching in Chopin's Mazurkas, whereas performers ponder how to let Mozart's concertos flow like oil and Beethoven's piano sonatas sound more orchestral. While music lovers are fascinated by Valentina Lisitsa's dazzling virtuosity and Krystian Zimerman's exquisite details, researchers concern themselves with Vladimir Pachmann's hand asynchrony and Alfred Cortot's rubato. More disappointing is that neither performers nor listeners seem to show the slightest interest in or basic understanding of what researchers hail as major contributions to knowledge. To them, this knowledge, which is mostly based on the massive flood of data that are euphemistically called "scientific evidence", may be nothing more than pedantic theories that have little, if any, practical value. It is the abstruse language used in these *recherché* writings that hinders existing performance research from reaching a wider audience.

One main reason for the existence of this veritable Tower of Babel appears to come from the general direction in which musicology has been heading in recent years. Impact factors have been widely used as the foremost criteria for academic evaluation. Journals are ranked and scholars are assessed based on the quantity of publications and the number of times their research is cited. This encourages, or even obliges, researchers to work in groups and on “hot” topics of their times. As a result, musicological publications have seen an increased number of authors; music research has turned from historical and anthropological approaches to more empirical, multi-disciplinary ones; and an increasing number of musicologists has shifted their disciplines from arts/humanities to social sciences, health sciences, or even hard sciences.

The COVID pandemic has exacerbated these trends, which have particularly impacted on studies of musical performance. Amid global-scale lockdowns, live performances have become out of sight and out of mind. Research involving performance analysis has also seen a sharp decline. To keep up with “hot” topics of the fast-changing world, music researchers have turned to areas such as the wellbeing of musicians, learning efficacy of music students, and innovative pedagogical approaches in music lessons. Music research is becoming the technical know-how to make us live healthier, learn faster, and work better. Studies of performance *per se* have become increasingly marginalised.

Against this background, there is a growing need to get research on *musical* performance back to the centre stage and out of the Tower of Babel, which can be seen as a crucial obstacle to the development of the field. One of the pillars of this Tower that needs to be demolished is terminology. Most performance research from analytic perspectives tends to concentrate on a narrowly focussed, excessively specific, and highly quantifiable performance feature (usually from a short piece or even an excerpt of a piece) at the expense of considering the musical implications of these features and the holistic style of the performance being studied. Qualitative descriptions of performance as a sensuous process—the way performers and listeners experience music—have been greeted with growing scepticism. In “top-rated” musicological journals, which crave “uncontaminated” data and “unbiased” results, a stilted style of writing that most music practitioners and lovers find alien has gained the upper hand.

While musicology frequently examines performances in terms that seem too technical and specific, music practitioners and listeners, on the other hand, tend to go to the other extreme by being imprecise, inconsistent, and excessively general. When it comes to discussing features of a performance, they usually lack an adequate vocabulary to describe what they hear and what they aim to achieve. For example, when discussing tempo, it seems that performers and listeners can describe a performance by nothing more than “fast” and “slow” (and probably the more ambiguous synonyms of these two words).

To develop a more thorough understanding of musical performance, it is essential to describe performance features accurately and, at the same time, without compromising the appreciation of their musical significance. In addition, these features should also be interpreted cogently in the context of the holistic style of the performer and the general stylistic trends of his/her era. This book addresses these needs by constructing a taxonomical framework that enables both musicologists and musicians to discuss tempo features beyond fast and slow. It consists of six stylistic variables as the criteria for describing, evaluating, and comparing styles of tempo in solo piano performance of Romantic repertoire. The variables cover three dimensions of tempo features, from basic tempo to two aspects of tempo variation. Altogether, they paint a fuller and clearer picture of the holistic style of a performance and a performer.

The proposed framework is based on a thorough review of existing musicological literature, but is far more than a set of theoretical precepts. Despite being theoretically-based, the framework, when applied to two case studies, produces findings that demonstrate a high extent of concordance between the results from empirical analysis of recordings and the opinions of music critics published in popular journals, magazines, and newspapers. It shows that these variables can be used as a reliable set of indicators to reflect and describe our actual aesthetic experience of music. Although the methods I have used to analyse the selected recordings are mainly empirical, I have not abandoned—and have never thought of abandoning—qualitative descriptions and perceptual judgement, both my own and that of other experienced, knowledgeable listeners. The figures and graphs are not discussed solely in the statistical language that prevails in most “top-rated” research in this field but also in the musically meaningful terms that music

practitioners can also understand. The empirical results are mainly used to assist readers' understanding and to support what I, both as an analyst and a listener, perceived during my listening and analytic processes. Analysis of the commentaries by authoritative music critics is used to support the results from empirical analysis. On the one hand, this combination of methods can enhance our understanding of performance style from different perspectives; on the one hand, it can help readers with different backgrounds grasp the central ideas presented in this book. While the main aim of this book is to contribute to musicological knowledge, I hope that musicians and music lovers find the ways I describe and discuss performance features precise and comprehensible and the examples used to illustrate these features interesting to read. It is my aspiration that performance studies gain more respectability in the music arena and continue to prosper in the long run.

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Many ideas in this book have been developed from my doctoral research, which was carried out under the supervision of Prof. Dorottya Fabian. I offer my most heartfelt thanks to my former supervisor for her excellent mentorship throughout my candidature and her immense support in the early stages of my research career. Without her meticulous guidance and unyielding support, this book would not have been possible. I also thank my masters supervisor, Prof. John Rink, for his insightful advice on various aspects of this research project as well as on my academic career development as a whole. They are both leading researchers of performance studies who have made enormous contributions to bridging the gap between musicology and music and have steered the field in a healthier and more sustainable direction. They are also figures of great charisma, who have had and will continue to have a huge impact not only on my academic career but also on my personality in general. I am indebted to my boss, Prof. Yu Feng (俞峰), President of the Central Conservatory of Music, for providing me with a great deal of support and freedom while I worked under his leadership. I am grateful to 胡舒翔 and 常闻皓, two of my masters students at Southwest University, for taking the artistic picture that is used as the front cover. It vividly captures the motion of my fingers on the piano keys and creates a sense of tempo in piano playing that perfectly matches the title of the book. Finally, I would like to thank Cambridge Scholars Publishing—particularly my commissioning editor, Adam Rummens—for their professional and efficient work on the publication of my manuscript.

# CHAPTER 1

## INTRODUCTION

### 1.1 Context

There is a long-standing composer-centred tradition in musicology. In studies of music, the main focus of researchers has been almost exclusively on composers and their compositional styles as a museum of artefacts. As Nicholas Cook (2013) notes, the musicological approach has been studying music and performance, with the performer's activities supplementary to composers' works, in contrast to studying music as performance, with the performers' activities being the central focus of research. He gave the example of *New Oxford Companion to Music* published in 1983, which included highly obscured composers but no entries for performers, to show this marginalisation of performers in the study of music (Cook 2013, p. 9). The marginalisation of performers and their performances in musicology has not been truly overcome until the present time. Even now, when we are discussing Bach's *Well-Tempered Clavier* or Beethoven's symphonies, for example, we may be concentrating solely on the composers and their compositions and ignoring the present-ness of music as sound: the sonic properties created and shaped by performers who bring these pieces to life through their performances (Barolsky, Ceballos, Plack & Whiting 2012, p. 78).

Notwithstanding, in the age of sound reproduction, performing and listening to canonical works have become standard. Famous performers of the twentieth and twenty-first centuries are perhaps better known than many, if not most, of their composer contemporaries. According to a survey carried out by a British radio station Classic FM in 2002, only 65% of British children could name a single classical composer whereas 98% could name at least one classical performer (Cook 2013, p. 9). Not only this, but performers' potential influence on the historiography of music is probably

comparable to that of great composers like Bach and Beethoven. Nikolaus Harnoncourt's historically-informed performances of Bach's *St. Matthew Passion* in the 1980s, for instance, might define an era of performance style as much as Beethoven's Symphony No. 9 transformed symphonic writings in the nineteenth century. Among innumerable performances that have had far-reaching and long-lasting influence are Vladimir Horowitz's 1986 Moscow recital, in which the pianist's interpretation of the music by Mozart, Chopin, Liszt, and Schumann, among other composers, dazzled the full-house audience and the entire country (Schonberg 1987, p. 435); Glenn Gould's recordings of the *Goldberg Variations* in 1955 and 1981 as well as his performance of Brahms' First Piano Concerto with Leonard Bernstein in New York in 1962 (Innes 2017); and Ivo Pogorelich's highly controversial renditions in the 1980 Chopin Piano Competition in Warsaw (Schonberg 1987, p. 460).

Yet, the amount of musicological research on composers and their compositions still far outweighs that on performers and performances. This neglect has left many questions surrounding musical performances unanswered. What characteristics in Pogorelich's rendition of Chopin aroused controversy? What quality made Horowitz's performances uniquely charming? And what were the distinctive features in Harnoncourt's Bach interpretation that made him stand out from his contemporaries? Although some answers to questions like these can perhaps be easily found in public discussions such as critical reviews and online forums, they have gained little academic scrutiny despite the growing prominence of musical performance studies in the past three decades. As Daniel Leech-Wilkinson suggests, musicology has achieved much of its influence at the expense of the

otherwise universally-shared sense that how music sounds while one hears it is fundamental to what it is ... [As a result, it has isolated] itself from the vast audience of music lovers who seek to understand what they experience. Perhaps this may help us understand why musicology is peripheral to the interests of most lovers of music (Leech-Wilkinson 2009, p. 10).

The study of performers and their performance styles might, therefore, open the rather neglected territory of musicology to a broader audience.



This book is based on the belief that renowned performers of our time and their performances should be warranted the same level of scholarly attention as is often received by composers and their compositions in musicology. In other words, our understanding of the best-known performers should by no means be inferior to that of the famous composers. Performing Western classical music requires significant creativity from performers (Davies 1997, p. 455). In other words, any performance by a competent, well-trained performer is far more than a neutral realisation of the notations in a score. Since many sonic properties and sound effects cannot be specified in the notational system of Western classical music, these details need to be created by performers, producing sound from the instruments they are playing. Performers' creative contributions differentiate performance from performance and performer from performer, resulting in listeners' perceptions of personal styles of individual performers. Experienced listeners may well distinguish between versions of a Bach's prelude and fugue played by Glenn Gould and by Angela Hewitt, of a Beethoven's symphony conducted by Herbert von Karajan and by Roger Norrington, or of Mendelssohn's Violin Concerto played by David Oistrakh and by Jascha Heifetz.

Recent research shows that the individuality of performers is recognisable not only by most listeners (Gingras, Lagrandeur-Ponce, Giordano & McAdams 2011; Koren & Gingras 2014) but also by performers themselves (Repp & Knoblich 2004). In addition, most performers at an elite level have developed a performance style that exhibits, to greater or lesser extent, distinctive characteristics. For example, Horowitz is claimed to have possessed a highly individualised style that aroused widespread controversy during and after his time. While some regarded his renditions as magical and hailed him as the greatest pianist of his generation, if not all time. Bernard Holland, music critic of the *New York Times*, stated that "Horowitz was sometimes viewed with despair by critics who thought his highly personalised interpretations ignored composers' intentions" (Holland 1989). Heifetz's highly personalised style has also been widely recognised. *The Gramophone*, one of the most authoritative classical music magazine, when reviewing a collection of Heifetz's recordings, commented the violinist's style in this way:

the specific components of Heifetz's style are instantly familiar: a lean, penetrating tone that seemed capable of countless gradations of nuance; a quick, intense vibrato; leaping slides, strategically placed; a cutting *spiccato* (and a genuine up-bow staccato); an ability to articulate at speed with perfect clarity and, most importantly, a propensity for "speaking" inflexions, where every stroke or shift harboured its own unique dynamic level so that, taken as a whole, any one phrase was infinitely varied. This last attribute is what gives Heifetz's playing its unique emotional "pull" and makes all 65 CDs in this mammoth set required listening for any violinist or devotee of great violin playing (Anon 1994).

While the individuality of particular performers has been widely and specifically discussed among music critics, the amount of discussion among musicologists is far from abundant. When it comes to discussing a performer's performance style, particularly how performers are different from and similar to each other, musicologists even have lacked a vocabulary that is as rich and specific as that used to describe compositional styles of composers and compositions. As Leech-Wilkinson notes: "we're quite good at editing Mozart (and hooray for that), and we're quite good at describing what's been said about him at different times, and why (and that's important, too), but if you ask how Böhm's 'Jupiter' differs from Hogwood's we can offer no more than generalisations" (Leech-Wilkinson 1999, p. 319). Alan Dodson similarly proclaims that "finding the tools and language to describe and interpret the myriad similarities and differences among recordings of the same piece is perhaps the fundamental challenge facing performance scholars today, in the discipline's formative years" (Dodson 2008, p. 129). The problem addressed by Leech-Wilkinson and Dodson remains to be solved until today, despite the fact that recent musicological research on individual performer's performance styles has started to grow.

Existing literature on performer's style is based on not so much systematic studies by music scholars as compilations of qualitative descriptions by music journalists and critics alike. This is particularly true in publications before the twenty-first century—such as the books on Vladimir Horowitz (Schonberg 1992), Arthur Rubinstein (Sachs 1995), and Glenn Gould (Bazzana 1997)—when recordings were generally not taken seriously as subjects of historical or analytical scrutiny by musicologists and

more advanced tools for analysing recordings that are available today did not exist. In these publications, source of information regarding performance style mainly comes from concert programme notes, memoirs, and reviews of live or recorded performances rather than performances *per se*. For instance, findings in Kevin Bazzana's book (1997) on Glenn Gould mainly come from qualitative descriptions of Gould's performance style that are based on the author's own perceptual judgement and comments by contemporaneous musicians and critics.

Recent years have seen a growth in research of performers' styles that focusses on different parameters of performance. These studies mainly investigate performance conventions of a particular tradition or repertoire, including that of a particular composer's works (Stowell 1994; Fabian 2003; 2015; Musgrave & Sherman 2003; Leikin 2011), the performance convention of a particular repertoire within a specific cultural or historical context (Cook 2009b; Volioti 2012), or salient stylistic features of a particular cultural or pedagogical tradition (Rosenblum 1988; Timbrell 1999; Barnes 2007; Lankovsky 2016). There is also research on conventions of performance style from a more analytic-empirical perspective. It generally concerns investigating specific expressive features and strategies that are common to the performances of a certain repertoire or in certain musical contexts, exploring the relationship between performance and the score and regularly involving mapping stylistic features examined in performance analysis to structural findings revealed in the analysis of the score. This includes studies of "phrase arching" (Todd 1985; 1989; 1992; Shaffer & Todd 1987; Repp 1990; Cheng & Chew 2008; Cook 2009b; Dodson 2011a), of how performers shape or articulate the large-scale structure of music (Bowen 1996; Cook, 1995; 1999; 2010; 2011; Llorens 2021), and of how performers use rubato (Leech-Wilkinson 2015), vibrato (Schoonderwaldt & Friberg 2001, Leech-Wilkinson 2010; Sung & Fabian 2011; Fabian 2015), portamento (Leech-Wilkinson 2006; 2010; Sung & Fabian 2011) and so forth.

Research has shown that performers can differ from each other in such parameters as tempo (Repp 1994; Bowen 1996; Repp 1999b; 1999c; Fabian 2003; Dodson 2011a), other timing aspects (Todd 1985; Repp 1992b; Repp 1997; Fabian & Schubert 2010; Spiro, Gold & Rink 2010; Dodson 2011b; Leech-Wilkinson 2015), dynamic variation (Todd 1992;

Cheng & Chew 2008; Cook 2009a; Dodson 2011b), timbre (Bernays & Traube 2014), ornamentation (Fabian 2003; 2015; Sung & Fabian 2011), articulation (Bresin & Battel 2000; Fabian 2003; Fabian & Ornoy 2009; Fabian 2009; Llorens 2021), pitch control (Fabian & Ornoy 2009; Leech-Wilkinson 2010), and other instrument-specific aspects such as vibrato and bowing in violin performances and pedalling in piano performances (Fabian 2005; 2015; Leech-Wilkinson 2010; Sarlo 2015). In addition, it is suggested that in many cases, it is the most renowned performers whose performances differ most from both each other and from the statistical norm (Repp 1990; Repp 1992b).

Nonetheless, existing publications that investigate a performer's style exhibit two major limitations. They either discuss it in general and subjective terms or focus on only one specific performance feature, such as phrase arching or vibrato, in the context of one short piece or one short excerpt. In other words, the findings of existing studies on a performer's style are either limited to qualitative descriptions with a general and subjective language that hinders the possibility of comparing style between performers accurately or confined to narrowly selected musical contexts that can barely be generalised to a broader repertoire or to a performer's style as a whole. Of the five important aspects of performance—tempo, timing, dynamics, timbre, and pitch—none has been scholarly scrutinised in a way that is both in-depth and holistic. In addition, different studies usually differ in terminology when describing style features.

These shortcomings make comparison across performers particularly challenging, especially when the differences between performances can be both enormous and subtle. Against this background, an adequate and accurate language for describing differences and similarities in performance style needs to be developed. This is exactly the aim of this book. I will approach this aim from one of the parameters of performance—tempo.

## 1.2 Scope

Music contains quantifiable elements of physical properties of the sound itself. These include tempo, metre, rhythm, pitch, timbre, articulation, dynamics, and so forth, depending on the nature of the instrument and the style of music. Performance style is conceptualised as performers' artistic

habits in the ways they produce sounds on their instruments. It includes features of frequency (pitch), loudness (dynamics), duration (tempo and timing), and tone quality (timbre). It is beyond dispute that neither musical expression nor perception are determined by a single musical element alone. They are engendered by combinations of elements working together or at odds with one another. Various parameters of piano performance—for example tone colour, balance of voices, and hand synchrony/asynchrony—take part in determining the style of a performer and its perception by listeners. All these aspects of performance vary, to a greater or lesser extent, among individual performers on the one hand, and among performers from different geographical locations, historical periods, and cultural or pedagogical traditions on the other.

Yet, it is hardly possible to discuss all these performance parameters in detail in one publication. This book is only concerned with the temporal aspects of performance—more specifically, tempo and tempo variation in performance. Confining the scope to the temporal aspect is not to suggest that other parameters have no role to play in discriminating performances and performers from each other. When we listen to a performance, we listen to all the parameters at the same time. But when we discuss performance, we might, if not should, need to discuss each of the parameters one by one. Focussing on one single parameter does not necessarily mean the neglect of the others. Rather, analysing each parameter separately can allow an in-depth discussion of their features on the one hand and contribute to the correlation between features of different parameters on the other. It hence deepens our understanding of performance as a whole, just like how analysing harmony, rhythm, or texture in the score can contribute to our holistic understanding of a composition.

Several factors justify the choice of tempo as the focus for this book. First, tempo is the most readily and reliably measurable parameter in recorded performance. Both its absolute and relative values will remain unchanged across recording technology, listening devices or the listener's subjective experience and taste. The measured data shows a high level of accuracy and reliability.

Second, tempo is one of the musical elements in recorded performances that remain most true and faithful to the original real-time performance upon analysis. It is unlikely to have a recording of classical

instrumental music in which the tempo is so fast (or slow) that the performer him/herself cannot actually reproduce it in real time (Johnson 2002, p. 198). Peter Johnson (2002) states that there is no strong evidence that the tempo of recorded performances is affected by the recording technology, even in early recordings where the methods used to make long records were extremely limited. Alf Gabrielsson similarly claims that

the only variable over which the performer has practically complete control, regardless of which instrument he uses, is the duration of the sound events, as well as of “non-sound” events (rests or silences). This circumstance is one of the explanations for why the manipulation of various durations, here generally called timing, is often considered to be the most important tool available to the performer (Gabrielsson 1988, p. 29).

Both Johnson and Gabrielsson acknowledge the faithfulness of tempo in a recording to the performer’s control and intention.

Third, tempo is one of the most crucial musical elements determining the overall musical effect and hence the style of a performance. Tempo variation has been one of the key aspects in musical performance from as early as Gregorian Chant (Hudson 1994). Tempo defines or influences such musical parameters as rhythm, melody, harmony, and even the perception of timbre, texture and structure. It can therefore be considered influential, in one way or another, on practically every aspect of music (Gabrielsson 1988, pp. 29–30). A number of renowned nineteenth-century composer-performers have acknowledged the important role tempo plays in performance. For instance, Richard Wagner as a conductor regarded tempo as a reflection of the performer’s stylistic understanding, musical intuition and “the touchstone of the quality of a performance” (cited in Bowen 1993, p. 86). For Wagner, tempo fluctuation was the “very life of music”:

The whole duty of a conductor is comprised in his ability always to indicate the right tempo. His choice of tempi will show whether he understands the piece or not. With good players again the true tempo induces correct phrasing and expression, and conversely, with a conductor, the idea of appropriate phrasing and expression will induce the conception of the true tempo (cited in Bowen 1993, p. 87).

The significance of tempo is well recognised in solo performance, too. Chopin's pupil Georges Mathias mentioned the importance of tempo rubato in of Chopin's music:

Everyone knows that rubato is an indication often encountered in old music; its essence is fluctuation of movement, one of the two principal means of expression in music, namely the modification of tone and of tempo, as in the art or oration, whereby the speaker, moved by this or that emotion, raises or lowers his voice, and accelerates or draws out his diction (cited in Eigeldinger 1989, p. 49).

Fourth, in terms of the perception of a performer's style, Bruno Gingras and colleagues (2011) note that timing information alone is sufficient to enable listeners' recognition of a performer. In experiments in which they asked listeners to match performances to corresponding performers based on tempo and articulation only, they found that most listeners, both musicians and non-musicians, performed significantly above the chance rate in this task, especially in the expressive excerpts. The finding suggests that sufficient information to identify a performer's personal style was contained in the excerpt. In other words, listeners could identify a performer's personal style with information on tempo and articulation alone, unaided by information on timbre, dynamics and so forth. In light of the findings, they concluded that "musical individuality is conveyed [from performers to listeners], at least in part, through expressive variations in tempo patterns" (Gingras *et al.* 2011, p. 1217). In experiments designed to investigate whether listeners tend to favour conventional performances over individualised ones, Bruno H. Repp (1997b) also used the element of timing alone. He showed similar trends in how the performances were rated and therefore that timing and tempo information can help determine listeners' perceptions of individual performance. This finding is similar to that of Gingras and colleagues (2011) discussed above. In short, all the above-mentioned research shows that the focus on tempo and tempo variation alone can contribute to our understanding of individual performance style in general.

While tempo is a term that is well defined and commonly understood, the term "tempo variation" may be more ambiguous and needs clarification before proceeding further to its analysis. What exactly does

“tempo variation” refer to and what specifically is this book analysing? There can be different levels and aspects of tempo variation. It is necessary to clarify the types and aspects of tempo variation so that the scope of this book can be made clear.

Repp (1992a) categorises timing variation into global and local: the former entails the hierarchical grouping structure of the composition, often with pronounced *ritardandos* at the ends of major sections where the latter entails within-gesture lengthening or shortening of notes, usually for expressive purposes. In other words, global timing variation refers to larger-scale tempo change, mostly at sectional and phrase levels; local timing variation refers to smaller-scale change in tempo or in timing value of note or a group of notes. Both global and local timing variations fall into the scope of this book. However, not every type of local timing variation is concerned.

Lengthening or shortening of notes may or may not be accompanied by lengthening or shortening of the pulse of music—change in tempo. Some researchers further divide the category of local timing variation into two sub-types: one involving the change in basic pulse and the other the change in timing value of note(s) while keeping the basic pulse (the tempo) steady. John Blackwood McEwen (1928), in *Tempo Rubato, or Time-Variation in Musical Performance*, proposed three principles of timing variation: the “Classical” principle of keeping strict time in the accompaniment despite tempo flexibility in the melody; the “modern” rubato in which time lost or gained is compensated for; and the adoption of a consistent “background” tempo to which performers return after changing the tempo. The “Classical” type corresponds to the lengthening or shortening of note(s) *is not* accompanied by lengthening or shortening of the pulse of music; the “modern” type to lengthening or shortening of note(s) *is* accompanied by lengthening or shortening of the pulse of music; and the “background” type to the global timing variation as defined by Repp (1992a).

Richard Hudson, in his book that provides a detailed history of tempo rubato by offering an exceptionally wide range of references and quotations from the Renaissance to the twentieth century, distinguished between what he called the “earlier” type of rubato, which corresponds to McEwen’s “Classical” type, and the “later” type, which corresponds to McEwen’s “modern” type (Hudson 1994). Such classification has been espoused by



various scholars despite differences in nomenclature. Sandra Rosenblum (1988) used the term “contrametric rubato” to describe the device for expressing localised nuance and “structural rubato” the tempo flexibility in form of *ritards* and *accelerandos* at structural points. She defined “contrametric rubato” as involving rhythmic alteration and embellishment of melodic notes while largely keeping the basic beat steady. She claimed that this type of rubato gradually faded out after the first half of the nineteenth century, when “structural rubato” gradually gained prominence. Based on her definitions and descriptions, it can be concluded that the two types of timing variations in her study—contrametric and structural rubatos—corresponds to Hudson’s “earlier rubato” or McEwen’s “Classical” type, and Repp’s global timing variation or McEwen’s “background” type respectively.

Clive Brown (1999) similarly categorised timing variation into two main types. He suggested that the modification of the basic pulse was found in performances of the Classical period and gradually became an established practice in the Romantic period. In the nineteenth century, the gradual acceptance of this kind of tempo modification led to decreasing prominence of the types of tempo rubato made over steady beats, an observation similar to that of Rosenblum (1988). His classification of timing variation echoes those by Rosenblum (1988), Hudson (1994) and McEwen (1928). Brown (1999) used the terms “modification over a steady beat” and “modification of the basic pulse” to refer to Hudson’s “earlier rubato” and “later rubato” respectively. These two types of timing variation are called “rhythmic alternation” and “tempo modification” by Neal Peres Da Costa (2012).

Based on previous studies, it can be concluded that there is a consensus among scholars that there are two major types of timing variation: the first type involves the re-distribution of rhythmic values of melodic notes while maintaining a steady and regular beat in the accompaniment, the second type involves the lengthening and/or shortening of the duration of a beat or a series of beats (i.e. a change in tempo). The first type is a type of local timing variation that does not involve tempo change. The second type can be a type of local tempo variation when it is deployed for expressing localised nuances or a type of global tempo variation when it is used for structural purposes.

In this book, only the second type of timing variation that involves a change in tempo—the lengthening and/or shortening of the duration of a beat or a series of beats (the “modern” type in McEwen’s terminology or the “later” type in Hudson’s)—falls into the scope. The type of timing variation involving the re-distribution of rhythmic values of melodic notes while maintaining a steady and regular beat in the accompaniment, that is rhythmic flexibility or “contrametric rubato” is not considered in this book. It is not to suggest that it is irrelevant to performance style. Rather, it was examined in detail in Hudson (1994) from a historical perspective and in Peres Da Costa (2012) from both historical and analytic perspectives. As mentioned in the preceding paragraph, Rosenblum (1988), Hudson (1994) and Brown (1999) all found that this type of timing variation is more relevant to performances in or before the nineteenth century. After that, it was gradually replaced by the type of local timing variation that involves the lengthening and/or shortening of beats. As this book is mainly concerned with performance style of contemporary pianists, according to the above studies, the first type of timing variation is more relevant to the sample of analysis and hence worth closer scrutiny.<sup>1</sup> This is also why I call it tempo variation instead of timing variation throughout my writing.

In summary, the scope of this book covers (1) tempo choice—the basic tempo in different sections of a piece; (2) global tempo variation—tempo fluctuation at large-scale structural level or for expressing large-scale structures of music; and (3) local tempo variation—lengthening or shortening of the beat or a series of beats for expressing localised nuances. As mentioned earlier, an adequate and accurate language for describing differences and similarities in performance style needs to be developed. This book contributes to scholarship by constructing a taxonomical framework in which a performer’s style of tempo and tempo variation can be evaluated and compared. It selects three complete solo piano pieces from the nineteenth century for analysis. This enables us to investigate how a performer consistently differs from the norm across repertoire. The selection of repertoire and the methods of analysis will be

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<sup>1</sup> Local tempo variation at the note level—those involving rhythmic alternation and ornamentation—is not discussed in this book. Based on the scales of studies of Hudson (1994) and Peres Da Costa (2012), individual styles of it can well form a separate research project.

specified in Chapter 2. Six stylistic variables, categorised into three dimensions of tempo and tempo variation, will be proposed in Chapter 3. They provide a more specific and consistent language for describing similarities and differences in performance style. The analysis empirically measures the extent to which a performer fits into each of the six theorised variables and hence deepens our knowledge about a performer's style of tempo and tempo variation. Two performers will be used as case studies to illustrate how the framework can achieve its goal, as will be shown in Chapter 4 and Chapter 5 respectively. Chapter 6 draws conclusions on the findings and discusses the directions that future research can and should take.

## CHAPTER 2

# REPERTOIRE, PIANISTS, AND METHODOLOGY

### 2.1 Repertoire and pianists

Since tempo plays an important role in the music of the nineteenth century, particularly the piano music of Chopin and Liszt, two solo piano pieces of Chopin and one of Liszt are selected to investigate different performers' styles of tempo (see Tables 2.1–2.3). The selection is based on the evidence, from both written documents and sound recordings, that tempo or timing variation is essential in the performances of these two composers' music.

As historical evidence shows, performers since the nineteenth century have employed abundant tempo variation in their renditions of Chopin's and Liszt's music. Although Chopin only notated "rubato" in the scores of fourteen compositions, all written between 1828 and 1835, Liszt suggested that Chopin dropped the notational practice because it "taught nothing to him who knew, [and] said nothing to him who did not know, understand, and feel" (cited in Hudson 1994, p. 207). In addition, Carl Mikuli, a pupil of Chopin, said that Chopin was "far from being a partisan to metric rigour" in his playing, and that he often used rubato, "accelerating or slowing down this or that theme" (cited in Hudson 1994, p. 178). These evidences surely amount to an invitation to discriminatingly and sensitively apply rubato in Chopin's music to capture the composer's aesthetic spirit (Cullington 1996, p. 259).

The use of rubato in Liszt's playing is hinted at by the notational practice in his music. In fact, Liszt frequently indicates tempo changes in his scores, using terminology such as *rallentando*, *ritardando*, *ritenuto*, *accelerando*, *stretto*, and *stringendo* (Hudson 1994, p. 262). Liszt's pupils and contemporaries are another source of information supporting the use of rubato in his performance. Writing about a lesson he had with Liszt in 1882, Carl Lachmund reported that "Liszt seemed to pay little attention to a steady

beat, and yet neither the aesthetic symmetry nor the rhythm was disturbed” (cited in Hudson 1994, p. 263). This is just one of the many reports of Liszt’s use of rubato in his playing, both of his own music and the music of other composers.

Widespread use of rubato is evident not only in writings about nineteenth-century performance practice but also in early recordings of the music of Chopin and Liszt. Robert Philip (1992, p. 1) argues that recordings of the early twentieth century

have a particular relevance to the study of performance practice in the nineteenth century. Many of the musicians heard on early recordings were brought up in the late, or in some cases mid, nineteenth century, and their performing styles can be seen as remnants of nineteenth-century style.

He notes that one of the main characteristics of early-twentieth-century recordings was “varieties of tempo rubato which included not only detailed flexibility of tempo, but also accentuation by lengthening and shortening individual notes” (Philip 1992, p. 229).

It can be inferred that various types of tempo or timing variations have been some of the core features in performances of Chopin and Liszt since the nineteenth century. This book makes no attempt to explore historically-informed performance practice, which has been studied extensively in the past two decades. But the evidences from the above-mentioned written documents and sound recordings justify the selection of the solo piano music by these two particular composers for the purpose of studying style of tempo and tempo variation in modern performances. Clearly, their works provide performers with ample room for demonstrating salient characteristics of global and local tempo variations.

Three solo piano pieces by Chopin and Liszt, composed between 1831 and 1853, are selected for analysis. The selection is based on their continued popularity and the availability of an abundance of modern recordings, which give advantages for empirical study. In addition, the sectional nature of the two larger-scale works—Chopin’s First Ballade and Liszt’s Sonata—may help illuminate how performers articulate musical structures in different ways; the shorter piece—Chopin’s D-flat-major Nocturne—is with more unified structures and may offer insight into performers’ tendency to shape more nuanced and localised events through

tempo variation. Altogether, the selected pieces contain a large variety of musical styles, formal designs, structural features and pianistic techniques that can be found in early nineteenth-century solo piano repertoire. They are also highly expressive pieces that permit a great deal of freedom in tempo variation in performances, and hence much potential for performers to demonstrate their personal style.

Ten recorded performances of each piece were selected for empirical analysis. As many studies have suggested, performance conventions change over time (Philip 1992; Bowen 1996; Fabian 2003; Leech-Wilkinson 2009; Rector 2020; Ornoy & Cohen 2021). To reduce the effect of historical differences in performance style, the sample is confined to performances by pianists born in the 1970s and 1980s (i.e. between 1970 and 1989) and in their mid-careers, as well as to recordings made in the past 20 years (since 2003). This is not to imply that the selected pianists can fully represent the performance style of the entire contemporary generation. Although it may not be difficult to collect a larger sample of recordings, the effort of analysing 30 versions of three entire pieces with existing analytic methods, especially when it includes ten complete performances of the 30-minute-long Liszt Sonata, is enormous. It would be impractical to include and analyse most, if not all, commercial recordings of this piece available in the market. Most importantly, from the listener's perspective, the inclusion of a huge sample size is not realistic. It would also be unrealistic to assume that an ordinary listener has listened to most, if not all, commercial recordings of a piece. It is assumed that ten recordings of each case-study piece are an appropriate sample size in terms of both the effort of the analyst as well as the likely experience of a well-informed listener.

To enrich the stylistic diversity of the selected performances, pianists of a variety of cultural and pedagogical backgrounds have been chosen. In total, there are 21 pianists from 14 different countries over three continents. In addition, I have attempted to have as many pianists who recorded all three pieces as possible. Detailed information on the selected recordings is listed in Tables 2.1–2.3 overleaf. Brief biographical information on all the selected pianists is provided in Table 2.4, sorted according to their year of birth. Names in bold identify the performers to be examined as case studies in Chapters 4 and 5.